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AMERICAN

RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, FINANCE,

INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

SATURDAY, MAY 5, 1860.

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ESTABLISHED IN 1831.

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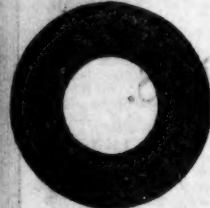
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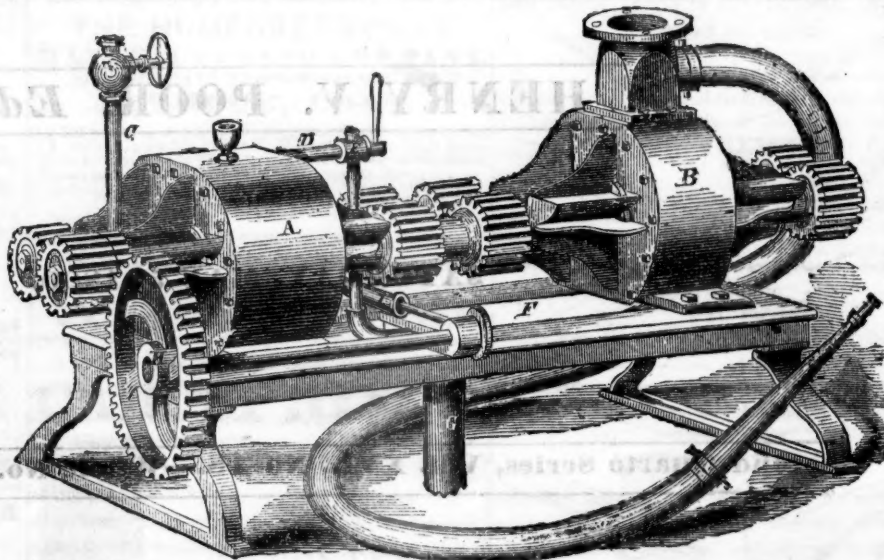
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SECOND QUARTO SERIES, VOL. XVI., No. 18.]

SATURDAY, MAY 5, 1860.

[Whole No. 1,255, Vol. XXXIII.]

Mr. FREDERIC ALGAR, No. 11 Clements Lane, Lombard Street, London, is the authorized European Agent for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, May 5, 1860.

(For the American Railroad Journal.)

Victoria Bridge.

(Continued from p. 347.)

In order to see how the wooden truss will compare with the tube in respect to proportion of superfluous to effective material, I will take a Bridge of the McCallum plan, as designed for a span of 242 feet in the clear. In choosing this particular description of girder as a standard, I do not wish to be considered as expressing any opinion in its favor as compared with other descriptions of wooden girders; but it is taken simply because the details for such a comparison are more readily at hand; and as the McCallum girder does not depend upon iron rods, but *entirely upon wood*, the issue presented as to the relative merits of wood and iron is more complete. The amount of material in such a Bridge is as follows:

	ft. B. M.	lbs.
Top ch'ds and straining beams.....	22,292	53,853
Keys.....	912	2,204
Lateral bracing and ties.....	4,794	11,585
Lateral bolts.....		448
Bolts for splicing &c.....		2,325
Total weight in top.....		70,415
—or 35.2 tons.		

	ft. B. M.	lbs.
Bottom chords.....	18,806	45,448
Clamps and keys.....	5,035	14,100
Lateral bracing.....	1,964	4,746
do rods, bolts and shoes.....		1,980
Bolts for splicing.....		4,764

Total weight in bottom.....71,038
—or 35.5 tons.

	ft. B. M.	lbs.
Braces in sides.....	26,883	66,000
Arch braces.....	4,096	9,000
Vertical ties.....	25,204	60,909
Bolts &c.....		3,517

Total weight in sides.....140,326
—or 70.1 tons.

Making the total weight of bridge 140.8 tons.
The floor timbers and track would add as follows:

	ft. B. M.	lbs.
Floor timbers and stringers.....	21,485	53,500
Bolts &c.....		678
Rails, chairs, spikes &c.....		10,462

Total.....64,640
= to 32.3 tons.

The total weight of Bridge and Track would therefore be 178.1 tons against 305 tons, which is the weight of one span of the Victoria tube and track.

The superfluous or non effective material in the Wooden Bridge made necessary by the framing is, as given below, and in this category I will include the lateral bracing top and bottom, as it is claimed that in the tube nothing extra is required for this duty.

Superfluous material in the top.

	lbs.
Keys.....	2,204
Lateral bracing and ties.....	11,585
Lateral bolts.....	448
Bolts for splicing chords.....	2,325

Total.....16,562
= to 8.28 tons—

Superfluous material in the bottom.

	lbs.
Clamps and keys.....	14,100
Lateral bracing.....	4,746
Do. rods, bolts and shoes.....	1,980
Splicing bolts, etc.....	4,764

The total area of the lower chord is 465 inches, 300 of which is available, leaving 165 non-effective.....16,391

Total.....41,981 lbs.
= to 20.99 tons.

Superfluous material in the sides.
Reduction of vertical ties in framing.....24,863 lbs.
Bolts, etc.....3,517

Total.....27,880 lbs.
= to 13.94 tons.

The comparison would stand as follows:

	In the tubes.		In the wooden bridge.	
	Effective material.	Material superfluous.	Effective material.	Superfluous material.
	Tons.	Tons.	Tons.	Tons.
Top.....	64.6	11.4	76.0	26.9
Bottom.....	64.4	27.6	92.0	14.5
Sides.....	23.6	50.4	74.0	56.2
Totals.....	152.6	89.4	242.0	97.6

The superfluous material therefore is 38 per cent. of the whole in the tubes, while in the wooden bridge it is only about 30 per cent., and this comparison is made on the assumption that the material through the centre of the top and bottom of the tube is effective for longitudinal strains.

It may fairly then be assumed, that as regards the superfluous material, the wooden structure loses nothing in the comparison, and that it fulfills the *second* condition necessary in a proper structure quite as well as the boiler plate bridge.

As regards the distribution of the material, the same arguments apply here as in the case of the iron lattice, viz: that the material subject to the strains of extension and compression, is condensed into a small compass, *directly where these strains are communicated*, and that it is in the best possible form to resist these strains. It would appear, therefore, that a well constructed wooden bridge meets the *third* condition.

A comparison of the *strength* of the McCallum girder as designed for a span of 242 feet, with the Victoria tube, will not I think offset the advantages already enumerated.

The weight of a McCallum girder of 242 feet span in the clear, with its track and a rolling load of one ton per foot, is 410 tons; and the strains of compression and extension at the centre of one of the chords due to this load uniformly distrib-

ed, is 418,417 lbs. The whole area of the upper chord, 492 inches, being effective, the strain per square inch is 840 pounds. The maximum value being 5,600 pounds per square inch, the factor of safety is about 6.55.

The section of the lower chord has 300 square inches fully available for tension, and the strain is, therefore, 1,378 pounds per square inch.

The maximum value being 12,000 lbs., the factor of safety is 8.7.

The following table gives a comprehensive view of the relative characteristics of one of the Victoria tubes and a McCallum girder of same span, as regards weight, strength and cost.

	Victoria tube.	McCallum girder.
Relative strength of same weight of material to resist compression.....	1	3.06
Do. do. to resist tension,	1	5.30
Weight of effective material	152.6 tons.	97.6 tons.
Do. of non-effective do.	89.4 "	43.2 "
Total weight of girder....	275.0 "	140.8 "
Least factor of safety.....	3.7 "	6.55 "
Cost per foot	£57	£8.

In these various features then, the wooden girder has these advantages viz:

1st. The material has more than three times the value with equal weights to resist compression.

2nd. It has more than 5 times the value with equal weights to resist tension.

3rd. The proportion of superfluous or non-effective material, to effective material is 1.5th less.

4th. The total weight of bridge is only about one-half.

5th. The factor of safety is nearly double; and

6th. The cost is only about one-seventh.

Surely here are large margins, so large, indeed, that it is not at all necessary to be over nice in the comparisons. In fact, the girder with which I have here compared the Victoria tube with, only one-half the weight of material has nearly twice the strength.

One peculiarity in the construction of the McCallum girders is what is called the *arch brace*. These are heavy timbers extending from the upper corners of the masonry of the piers and abutments, passing through the lower chords, and between the side braces and abutting against the upper chords and straining beams at a point about 36 feet out from the bearings—in effect shortening the span of 242 feet to 170. The strains have been calculated, however, without any reference to the service these braces perform, and the results given are such as would be due to the entire span. Between the points of support afforded by these braces, the bridge, with the track and rolling load of one ton to the foot, would weigh about 300 tons uniformly distributed, and the strain upon each chord due to this span and this load, would be but 212,500 pounds—or, but little more than one-half the strain allowed in the comparison.

Our "perishable" American bridges need but a fair examination to establish their superiority over the tubes at least, in every respect, except as regards their maintenance. This question is purely a financial one, and is to be considered in connection with the first cost. Experience has shown that a well constructed wooden bridge, properly covered and protected, will last at least 20 years. In the report of the President and Chief Engineer

of the New York and Erie Railroad Company for the year 1857, a complete schedule of all the bridges on the road is given, at the end of which, S. S. Post, Esq., the Chief Engineer, whose experience entitles his opinion to the utmost confidence, remarks in relation to the bridges I have quoted, and to others upon that road: "These bridges are of the first class. * * * They have been constructed in the most substantial manner, from the best of materials, and remain in every respect sound and in perfect condition. * * * If kept properly painted, these bridges will unquestionably, with very little other repair, perform their offices well, and with perfect safety, for 20 years or more."

It must be remarked that too little attention has been given to the necessity of covering and protecting our wooden bridges; and to this, must be attributed their comparatively short life. Those recently constructed on the Grand Trunk Railway under the direction of Mr. Starke, have, however, had the utmost care bestowed upon them in this respect, and it is believed that the precautions he has taken will give them a durability heretofore unknown. Tubes are yet too new to determine what effect time and corrosion may have on them. It is certain that they require constant repairs and constant painting. It is stated that the Grand Trunk Company pay at the rate of 80 cents per foot per annum for the painting of the Victoria tubes.

The difference of first cost between the tubes and wooden girders for the Victoria bridge would not have been less than £45 per foot, making every allowance for necessary staging for raising the bridge, for thoroughly planing and painting, and then covering it. With such precautions, 25 years may be considered as a very low estimate of its durability; but, I will assume 20 years as the extent, and offset the annual cost of repairs and painting, by the amount which it costs to paint the Victoria bridge; although this amount is at least twice the sum required for the wooden structure. I will also assume the tube to be imperishable. We have then simply to consider the difference in first cost, and compute the interest for 20 years. Sixty-six hundred feet, at £45 per foot, (the difference,) is £297,000. The interest on this, at 6 per cent., is £17,820 per annum. Without compounding it, as we might very properly do, the interest for 20 years is £356,400. Now the first cost of the wooden bridge, at the very high valuation I have allowed, is £79,200. The interest on the difference of cost would, therefore, rebuild the wooden bridge four and a half times during the 20 years.

Great stress has been laid upon the risk from fire, involved in the use of wooden bridges. It is not simply the value of the bridge itself, and the cost of its reconstruction, which is to be considered, but the delay to the traffic of the road, consequent upon its *unexpected* destruction. When reconstruction becomes necessary from natural decay, it can be accomplished without the stoppage of a single train, as has been proved in the rebuilding of hundreds. Now the value of the risk is precisely what it will cost to avoid it. Without discussing a dozen cheap expedients of construction, which would reduce the risk so as to be inappreciable, it is quite certain that it can be done by watching, if by no other process. A watchman at each end of a bridge of the length of the Vic-

toria tube, whose duty it should be to pass to the centre immediately after the passage of any train, would render its burning impossible. Allowing for such a patrol night and day, the cost would not exceed £300 per annum. If we capitalize this sum, at 6 per cent., we shall find that it only calls for an investment of £5,000. If, therefore, a sum less than a pound per foot will render a wooden bridge indestructible from fire, it would seem to be poor economy to spend £45 per foot for that purpose.

The statistics of our American railroads, however, show that without very special provisions, the risk to wooden bridges from fire is less than for almost any other species of property. On the New York and Erie Railroad there are 146 distinct wooden truss bridges ranging from 40 feet to 792 feet in length each. During the past nine years there has been but one bridge destroyed by fire, and this too without any special protection.

Unquestionably, a lining of tin or sheet iron, adding but a small per centage to the cost, would be as perfect a protection where the trains pass between the trusses, as though the whole structure was of iron. Where trains pass over the top, it is always customary to cover them in this way. It is a mere question of cost, and when so small an addition will accomplish the object, there is no reason for the assertion that, to avoid risk from fire, the whole frame-work must be of iron, for it can be done at far less expense.

All the various elements involved in the comparisons made between the different descriptions of girders which have been considered, after all bring us down to the true criterion of pounds, shillings and pence. This is the inevitable standard, and although it may for a time be evaded, and kept out of sight in the mist of all these disquisitions; yet, practical men who provide the means for such constructions, whenever they can understand that the question of strength is disposed of, without disadvantage to the low-priced structure, will then ask the question: Which is cheapest in the *long run*?—and it is by a fair solution of this problem, that the merits of the structures are to be decided.

Assuming that the tubular plan is everything that could be desired in every respect for the Victoria bridge, it is a question whether proper economy has been exercised in the arrangement of the spans. It is a maxim in such work, (provided the plan of superstructure adopted will permit the required spans,) that unless there are special features existing in the stream, fixing the abutments and piers at particular places, as in the case of the Britannia bridge, the point of economy is reached only when the cost of the piers and the cost of the superstructure balance each other. In the case of the Victoria bridge, the piers cost twice as much as the tubes, yet Mr. Ross, in his report, seriously asserts that the most economical arrangement has been adopted, and that to have lengthened the spans, so as to have reduced them one in number only, on each side of the centre span, would have increased the cost about £30,000. A few figures will render any comment or argument upon such an assertion unnecessary.

The piers cost £800,000, according to Mr. Ross, which is an average of £33,333 each. To have made one less opening on each side of the centre, would, therefore, have reduced the cost of the

piers £66,666. It would have increased the length of each span from 242 to 264 feet, and increased their weight as the squares of the span, making each span, including the bearings, weigh 321 tons, or 1.15 tons per foot. The present spans weigh 276 tons each, or 1.07 per foot. The cost per foot would, therefore, be increased from £57 to £61 5s., increasing the total cost of the superstructure about £26,300 only. Deducting this from the saving to be made by dispensing with two piers, and the result is that instead of the bridge costing £80,000 more, as Mr. Ross says, it would have cost more than £40,000 less, and the cost would have stood:

For the piers £733,333
" superstructure 426,300

Total £1,159,633
—instead of £1,200,000.

Now let this same process be repeated with a still less number of spans, and as the cost of piers and superstructure approach an equality, as they must necessarily, it will be seen that the aggregate of both will decrease. Let us, for instance, suppose the spans to be reduced to nine on each side of the centre opening.

This would reduce the number of piers—six making a saving of £200,000. The length of each span in the clear would be increased from 242 to 331 feet. The weight of each span would be increased to 486 tons. The average weight per foot, including bearings, would, therefore, be 1.4 tons. The price per foot would be increased to £74 10s. The total cost of superstructure would be increased to £461,900
While the piers would be reduced to 600,000

Total cost £1,061,900
—instead of £1,200,000.

The lowest aggregate is reached only when the two sums are alike, and this point will not be found with piers at £33,333 each, and tubes at £54 per ton, until we have reached spans of over 350 feet, and the total saving would, in that case, be about £200,000.

By what possible calculation Mr. Ross could have arrived at the conclusion he did, it is difficult to see.

Mr. Liddell, in his report, says:

"Mr. Ross' calculation of the size of the spans in relation to the piers, is really amusing. As positively as we can demonstrate, that to divide a given line into two parts, such that their products may be a maximum, the two parts must be equal; so positively can it be shown, that until the cost of the superstructure balances the cost of the piers, the most economical proportion has not been arrived at. Mr. Ross, however, proves to his own satisfaction, that although the piers are estimated to cost £800,000, and the superstructure £400,000, we cannot increase the spans and diminish the number of piers without a loss!! Mr. Brunel has given a juster estimate of this, and it is no doubt founded on the relative amounts of superstructure and piers given him."

(To be continued.)

Texas and New Orleans Railroad.

The *Galveston News*, of the 15th April, says that Messrs. C. L. Wentz & Co., contractors of the Texas and New Orleans Railroad, have already completed twenty-five miles of their track from Beaumont, and expect to be through to Liberty by the 15th of May. They intend soon to put on a force at Houston, to work eastward, and hope thereby to lay the entire Texas division by the 1st of August.

Ohio and Mississippi Railroad.

Below we give the first report of J. W. Alsor, Esq., Receiver of this road. The report represents that it is necessary for the successful operation of the road, that out of the receipts of the road, after paying current expenses, there be paid the proper and legal taxes and assessments on the property of the company, and the rents and balances due and to become due to other companies, and for injuries to cattle along the line and to property transported by the company, as well as amounts due and to become due under contracts for the use of rolling stock by the company; also interest on the first mortgage bonds. Authority was granted to the Receiver by the Court to discharge liabilities as suggested by him.

LIABILITIES.

Liabilities of the Eastern Division, as far as ascertained, to April 9, 1860:

Capital stock	\$6,478,854 00
Loan from Cincinnati	600,000 00
1st mort. bonds, due July 1, 1872..	2,050,000 00
Coupons of inter't unp'd from Jan. 1, 1858, to Jan. 1, 1860.	\$206,045 00
Interest on coupons to April 1, 1860	12,364 55
2d mort. bonds, due Oct. 1, 1860...	258,000 00
Coupons of interest unpaid to April 1, 1860	\$84,980 00
Interest on coupons to April 1, 1860	10,744 10
Construction bonds, due March 1, 1876	4,242,000 00
Coupons of interest unpaid from September 1, 1857, to March 1, 1860	\$742,350 00
Interest on coupons to April 1, 1860	47,513 38
Income bonds, due May 1, 1881....	3,320,000 00
Coupons of interest unpaid from November 1, 1857, to May 1, 1860	\$581,000 00
Interest on coupons to April 1, 1860	32,535 16
Old floating debt prior to May 1, 1856, viz:	
Bills payable	\$68,409 24
Judgments	50,446 03
Open accounts	6,377 79
Interest on above, estimated	11,750 00
Arrearages due employees and bills of supplies to May 1, 1856	7,262 52
Do. from May 1, 1856, to May 1, '58	4,447 66
Do. from May 1, 1858, to Feb. 1, 1860	5,118 96
Do. from Feb. 1, 1860, to April 1, 1860	74,774 54
Notes due W. H. Aspinwall & Co. and associates, dated Sept. 1, 1855, viz:	
One note for	\$215,800 00
One note for	57,757 11
One note for	18,175 31
One note for	68,267 58
Interest from Sept. 1, 1858, to Ap. 1, 1860..	34,200 00
Due W. H. Aspinwall and associates for use of rolling stock to April 1, 1860, approved by Directors	96,110 56
Due to foreign roads	574 67
Notes to Chas. Kilgour, due May 15, 1860	6,000 00
Drafts for charges unpaid	31,188 46
Total liabilities as above	\$19,023,156 62

Cash on hand, April 9th, 1860	\$39,695 91
Due from New York office	4,973 84
Do. Western Division, on Earning Account	14,274 87
Do. Western Division, on Charges	27,724 05
Do. Adams Express Company	3,087 50
Do. Post Office Department	11,087 41
Do. Alfred Gaither	3,158 20
Notes due from individuals	584 00
Due from Agents on line of road	6,688 84
Due from foreign roads	845 30

Total assets

The following items are appended, as belonging to the schedule of liabilities:

Capital stock, as above	\$6,478,854 00
Collateral deposited with Cincinnati, to secure payment of \$600,000...	1,000,000 00

Total

STATEMENT OF EQUIPMENT, CARS, ETC. [No.]

Locomotives	84
Passenger Cars	31
Mail and Baggage Cars	10
Box Freight Cars	223
Stock Cars	66
Flat Cars	88
" " inside being nearly worthless	77
Gravel Cars	45
Hand Cars	41
Pole Cars	26
Cross-ties at various stations	7,972
Cords of Wood along the line	7,445

BONDED DEBT OF THE COMPANY.

First Mortgage Bonds	\$2,050,000
Second Mortgage Bonds	258,000
Construction Bonds	4,242,000
Income Bonds	3,320,000
Total	\$9,870,000
Interest on 1st mort. bonds, due	\$207,045 00
Interest on same from maturity to April 1, 1860	12,364 55
Interest on Second mortgage bonds, due	\$84,980 00
Interest on same from maturity to April 1, 1860..	10,754 10
Int. on const'n b'ds, due	\$742,350 00
Interest on same from maturity to April 1, 1860.	47,513 38
Int. on income b'ds, due	\$581,000 00
Interest on same to April 1, 1860	32,535 16
Total	\$1,717,542 19

ENGINES AND CARS BELONGING TO ASPINWALL AND ASSOCIATES.

Number of Locomotives	14
" Passenger Cars	3
" Mail, Baggage and Express Cars	4
" Box Freight Cars	161

THE RECEIVER AUTHORIZED TO BORROW MONEY.

In addition to the authority given to the Receiver to discharge certain liabilities, as suggested in the report, the Court also entered a decree, authorizing him to borrow money in the name of the company, to anticipate the reasonable, reliable receipts of the road, to enable the Receiver to meet promptly existing engagements, he being required to report to the Court the amount so borrowed, and the time the loan has to run.

Indiana and Illinois Central Railroad.

It is stated that work is to be commenced on the Indiana and Illinois Central Road, from Indianapolis to Decatur, Ill., and that operations will be steadily prosecuted until the road is completed.

JOURNAL OF INSURANCE LAW.

CONTRACT OF INSURANCE, AGREEMENT TO INSURE
BINDING.

The case we are about to consider grew out of the burning of the ship 'Great Republic' at its wharf in the city of New York, and was a re-insurance upon that vessel. The Union Mutual Insurance Company of New York, having made insurance of the ship to a large amount, authorized Charles W. Storey, at Boston to apply for and obtain from either of the insurance companies there, re-insurance to the extent of ten thousand dollars.

Pursuant to this authority, on the 24th December 1853. Mr. Storey made application to the president of the Commercial Mutual Marine Insurance Company for insurance at the same time presenting a paper, partly written and partly printed, as embodying the terms of the application. The paper was as follows: "Re-insurance is wanted by the Union Mutual Insurance Company, New York, for \$10,000, on the ship Great Republic, from Dec. 24, 1853, at noon, for six months ensuing."

"This policy is to be subject to such risks, valuations and conditions including risk of premium note, as are or may be taken by the said Union Mutual Insurance Co., and payment of loss to be made at the same time, 3 per cent."

The president, after consultation with one of the directors of the company, declined to take the risk for a premium of three per cent., but offered to take it for three and a-half per cent. Mr. Storey replied, that was more than he was authorized to give, and left the office.

Mr. Storey immediately apprised his principals, by a telegraphic dispatch, that the risk could be taken for three and a-half per cent. for six months, or six per cent. a year. The reply on the same day was: "Do it for six months, privilege of cancelling if sold." This reply did not come to the hands of Mr. Storey until Monday, the 26th day of December, when he went to the office of the respondents, and found there the president of the company, but no other person, as the day was generally observed as a holiday, Christmas having fallen on Sunday. He then informed the president that he would give the additional half per cent and altered the 3 to 3½ on the paper. To this proposal the president assented and retained the paper.

The defendants answered to this that "its president did assent to the terms and provisions of a re-insurance to be completed and executed by this defendant, by the making and execution of a policy in due form, according to the requisitions of the laws of Massachusetts, the by-laws of this defendant, but they were not assented to as a present insurance."

The case was first tried at the Circuit court for the district of Massachusetts, from which it was appealed to the Supreme Court. We give the opinion of the appellate Court upon the point of an agreement to re-insure as distinguished from the insurance itself.

CURTIS, J.—Upon these facts, we are of opinion there was an agreement to re-insure according to the terms contained in the proposal, concluded by and between Mr. Storey and the president at the interview on Monday the 26th of December. The paper contained every particular essential to a contract to make re-insurance. It ascertained the

subject of insurance, the commencement and duration of the risk, the parties, the interest of the assured, and the premium; and for the special risks, the valuations and conditions, it referred to the original contract of insurance made by the complainants, by reason of which they were seeking re-insurance.

On Saturday, the president had offered to contract in accordance with the paper, saving a difference of one-half per cent. on the premium.

It was argued that it could not be considered an acceptance, on Monday, of a continuing offer made on Saturday, because, when the complainants authorized Mr. Storey to give three and a-half per cent., they at the same time imposed a new condition by the words, "privilege of cancelling if sold," but Mr. Storey testifies, and this is not denied by the answer, or by any witness, that when he made the application on Saturday, and before the president had named the premium which he was willing to take, the president said he supposed that they would have to cancel the policy, if the vessel should be sold within the time, and that he (Storey) assented thereto; and that at the interview on Monday when this point was referred to, the president said the usage in Boston would settle it, and he would not put any thing concerning it into the policy; and after some conversation concerning the usage, Mr. Storey agreed to take the policy without any mention of the privilege of cancellation.

Under these circumstances we do not perceive that the requirement of this privilege can be considered as at all varying, in the apprehension and meaning of the parties, the terms of the acceptance on Monday, from the terms of the proposal on Saturday. But whether, under all the circumstances, this should be deemed to have been a continuing offer, we do not think it necessary to determine; because, on Monday, either the president's offer of Saturday was accepted by Mr. Storey and its acceptance made known to the president, or the proposal was renewed by Mr. Storey, and accepted by the president. The fact that others chose to abstain from business on that day, did not prevent these parties from contracting, if they saw fit to do so; and when one of them either accepted a continuing offer, or renewed a proposal which was accepted by the other, they made a binding contract. Nor do we think the allegation of the answer, that the president informed Mr. Storey that no business was done in the office that day, but the next day he would attend to it, can reasonably be interpreted to mean that he had not made, or intended to make a contract for a policy. Their fair meaning is, that though he had agreed to make the insurance, as the secretary and clerks were not there, and the books not accessible, any action on the agreement must be deferred to the next day. The words cannot be understood to mean, that he would on the next day attend to what he had already done; and he had already made a contract for re-insurance, to be executed on the next day, by issuing a policy in due form to carry that agreement into effect.

On leaving the office of the defendants, Mr. Storey immediately informed the plaintiffs that he had effected this contract, and on the night of the same day the ship Great Republic was destroyed by fire, while laying at a wharf in the city of New

York. On the 27th day of December, the complainants tendered their notes for the agreed premium and demanded the policy of re-insurance. The defendants declined to make the policy. Several grounds have been insisted on in support of this refusal:

The first is, that by force of a statute of the State of Massachusetts, insurance corporations can make valid policies of insurance only by having them signed by the president and countersigned by the secretary. But we are of opinion that this statute only directs the formal mode of signing policies, and has no application to agreements to make insurance.

It is further insisted, that by the law merchant insurance can be effected only by a contract in writing. We do not doubt that the commercial law of all countries has treated insurance as made in writing by an instrument, denominated by us a policy; and there may be provisions of positive law in some countries, requiring an agreement to make a policy to be in writing. But there is no such statute of frauds in the State of Massachusetts. The common law must therefore determine the question; and under that law, a promise for a valuable consideration to make a policy of insurance is no more required to be in writing than a promise to execute and deliver a bond, or a bill of exchange, or a negotiable note.

The points taken by the defendants that their president had no authority to enter into an oral contract binding the company to make insurance, and that the premium note should have been actually signed and delivered, were each overruled and the judgment of the Circuit Court affirmed.

Central Railroad of New Jersey.

The following is a comparative statement of the receipts, expenses and net earnings of the three months ending March 31st, of the present year, with the same months of last year:

RECEIPTS.	1860.	1859.	Increase.
January..	\$75,105 88	\$61,145 27	\$13,960 06
February.	75,811 96	65,809 06	10,002 90
March...	103,675 33	74,519 14	29,156 19
3 m'ths.	\$254,592 62	\$201,473 47	\$53,119 15
Expens's			
3 mos.	102,146 37	83,398 82	\$18,747 55
Net earn.	\$152,446 25	\$118,074 65	\$34,371 60

Memphis and Charleston Railroad.

The following is a statement of the receipts of this road for March, 1860:

From passenger transportation	\$75,796 72
" freight	66,402 67
" mails	4,597 91
" express	2,456 49
" privileges	35 00

Total receipts	\$149,288 79
Operating expenses	64,800 43

Net earnings.....\$84,488 36

The receipts for the quarter ending March 31st, 1860 were:

From passenger transportation	\$248,580 39
" freight	198,976 66
" mail	13,793 73
" express	4,967 90
" privileges	105 00

Total receipts	\$466,423 68
Operating expenses	197,281 67

Net earnings.....\$269,141 91

Railroads of the State of New York.

A TABULAR STATEMENT exhibiting the capital of the several companies, the cost of road and equipment, the mileage, the earnings and expenses, and the dividends paid, each year since the completion of the Mohawk and Hudson Railroad in 1832 to the 30th September, 1859.

Computed mainly from official reports.

Corporate Titles of Companies.	Chartered in the year.	Share Capital.	Bonded Debt.	Floating Debt.	Total.	Cost of Road and Equipm't.	Length of Road.	M.	Passenger.	Freight.	Mails, etc.	Total.	Operating and Repairs.	Earnings less Expenses.	Dividends.	
		\$	\$	\$	\$	\$			\$	\$	\$	\$	\$	\$	\$	
1832.																
Mohawk and Hudson	1826	639,908	.....	.....	639,908	639,908	16.09	.....	61,675	.....	.....	61,727	27,309	24,418	.....
New York and Harlem	1831	155,405	.....	.....	155,405	155,405	0.85	.....	384	.....	.....	884	4,650	loss.	.....
Total	795,303	.....	.....	795,303	795,303	16.94	.....	62,059	.....	.....	62,111	31,959	20,152	.....
1833.																
Mohawk and Hudson	666,304	.....	.....	666,304	666,304	16.09	.....	69,300	3,708	694	73,602	36,652	36,950	.....
New York and Harlem	862,421	.....	.....	862,421	862,421	1.72	.....	5,019	.....	.....	5,019	1,862	8,157	.....
Saratoga and Schenectady	1831	300,000	.....	.....	300,000	300,000	21.50	.....	24,000	1,000	.....	25,000	15,000	10,000	.....
Total	1,828,725	.....	.....	1,828,725	1,828,725	39.31	.....	96,319	4,708	694	103,621	58,514	50,107	.....
1834.																
Mohawk and Hudson	666,500	.....	.....	666,500	666,500	16.09	.....	68,210	12,733	921	81,864	50,980	30,934	.....
New York and Harlem	405,327	.....	.....	405,327	405,327	4.48	.....	21,860	.....	.....	21,860	3,678	18,182	.....
Saratoga and Schenectady	300,000	.....	.....	300,000	300,000	21.50	.....	25,000	1,000	1,000	28,000	17,000	11,000	.....
Buffalo and Black Rock	1833	21,650	.....	.....	21,650	21,650	8.00	.....	1,000	.....	.....	1,000	1,000	.....	.....
Ithaca and Owego	287,500	.....	.....	287,500	287,500	28.75	.....	12,000	.....	.....	12,000	8,000	4,000	.....
Total	1,680,977	.....	.....	1,680,977	1,680,977	73.77	.....	129,070	13,733	1,921	144,724	80,608	64,116	.....
1835.																
Mohawk and Hudson	1,000,000	.....	.....	1,000,000	1,000,000	16.86	.....	84,776	26,237	1,519	112,582	66,170	46,412	.....
New York and Harlem	610,779	.....	.....	610,779	610,779	4.48	.....	38,429	.....	.....	38,429	32,183	6,246	.....
Saratoga and Schenectady	300,000	.....	.....	300,000	300,000	21.50	.....	28,000	1,500	1,000	30,500	20,000	10,500	.....
Buffalo and Black Rock	21,650	.....	.....	21,650	21,650	8.00	.....	1,100	.....	.....	1,100	1,000	100	.....
Ithaca and Owego	300,000	.....	.....	300,000	300,000	28.75	.....	13,000	10,000	500	23,500	20,000	3,500	.....
Rensselaer and Saratoga	1832	450,000	.....	.....	450,000	450,000	25.26	.....	10,000	1,200	2,100	13,300	10,000	3,300	.....
Total	2,682,429	.....	.....	2,682,429	2,682,429	99.80	.....	175,305	38,987	5,119	219,411	149,353	70,058	.....
1836.																
Mohawk and Hudson	1,000,000	75,000	.....	1,075,000	1,005,000	16.86	.....	103,470	28,185	1,859	133,544	78,850	54,694	.....
New York and Harlem	874,381	.....	.....	874,381	874,381	4.48	.....	64,085	.....	.....	64,085	60,992	loss.	.....
Saratoga and Schenectady	300,000	.....	.....	300,000	300,000	21.50	.....	27,500	1,500	1,000	30,000	18,000	12,000	.....
Buffalo and Black Rock	21,650	.....	.....	21,650	21,650	8.00	.....	1,200	.....	.....	1,200	1,000	200	.....
Ithaca and Owego	310,000	.....	.....	310,000	310,000	28.75	.....	16,000	15,000	600	30,600	23,000	2,600	.....
Rensselaer and Saratoga	450,000	.....	.....	450,000	450,000	25.26	.....	12,000	1,500	2,200	15,700	12,000	3,700	.....
Brooklyn and Jamaica	1832	284,850	85,000	.....	369,850	369,850	11.00	.....	.....	.....	.....	.....	.....	.....	.....
Utica and Schenectady	1833	1,600,000	.....	.....	1,600,000	1,600,000	78.00	.....	168,051	.....	8,496	176,547	33,498	143,049	.....
Total	2,682,429	.....	.....	2,682,429	2,682,429	99.80	.....	175,305	38,987	5,119	219,411	149,353	70,058	.....
1837.																
Mohawk and Hudson	1,000,000	82,500	.....	1,082,500	1,012,500	16.86	.....	97,167	14,429	4,774	116,370	83,850	36,520	.....
New York and Harlem	1,041,272	.....	.....	1,041,272	1,041,272	6.58	.....	65,622	.....	.....	65,622	71,408	loss.	.....
Saratoga and Schenectady	300,000	.....	.....	300,000	300,000	21.50	.....	28,500	1,500	1,000	31,000	19,000	12,000	.....
Buffalo and Black Rock	21,650	.....	.....	21,650	21,650	8.00	.....	1,300	.....	.....	1,300	1,000	300	.....
Ithaca and Owego	320,000	.....	.....	320,000	320,000	28.75	.....	16,000	18,000	700	34,700	30,000	4,700	.....
Rensselaer and Saratoga	455,000	.....	.....	455,000	455,000	25.26	.....	13,000	2,000	2,500	17,500	12,500	5,000	.....
Brooklyn and Jamaica	284,850	85,000	.....	369,850	369,850	11.00	.....	.....	.....	.....	.....	.....	.....	.....
Utica and Schenectady	1,600,000	100,000	1,708,000	1,708,000	78.00	298,266	19,211	47,477	122,738	33,800	22,772	8
Buffalo and Niagara Falls	1834	217,000	217,000	217,000	22.00	11,000	1,100	110	12,210	10,000	194,759	150,000	10
Long Island	300,000	300,000	300,000	15.00	25,000	1,500	1,000	27,500	27,500	2,210
Tonawanda	399,938	399,938	399,938	31.50	40,072	40,072	20,474	19,598
Total	6,939,710	267,500	8,000	6,215,210	6,145,210	259.45	656,927	88,529	29,295	665,751	398,470	254,291	182,772	18

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An asterisk (*) occurring in the column headed "Rolling-Stock" signifies that the cost is included in that of "Railroad and Appurtenances." A dash (-) signifies "not ascertained." Running dots (....) signify "not ascertained." Land-Grant Railroads are in *italics*.

Years ending.	Railroad.				Equipment.			Companies.	Abstract of Balance Sheet.										Earnings.			
	Main Line.	Lateral and Branch Lines.	2nd Track and Sidelings.	Road in progress or projected.	Cars.				Property and Assets.			Liabilities.				Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trains.	Gross.	Net.	Dividends.	Price of shares.
					Engines.	Passenger.	Freight, etc.		Railroad and Appurtenances.	Rolling-Stock.	Invested in foreign works.	Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.								
M.	M.	M.	M.	No.	No.	No.		\$	\$	\$	\$	\$	\$	\$	\$	\$	M.	M.	\$	\$	P.	C.
ALABAMA.																						
30 Jun. '89	43.3			72.3	3	2	19	Alabama and Florida	1,086,278	*		539,396	473,500	101,205	1,127,174	27.3		59,430	22,359			
28 Feb. '89	30.3			58.1	3	2	19	Alabama and Mississippi	461,505	30,991		335,010	109,500	21,632	518,965	30.3		55,791	31,852			
31 May '89	99.2			68.4	7	7	84	Ala. and Tennessee Rivers	2,101,007	144,549		1,054,915	713,226	212,496	2,264,468	99.2	76,133	155,628	78,997			
30 Jun. '89	57.0			171.3				Mobile and Girard	1,500,000							57.0	236,791	76,773	21,006			
1 Jan. '89	319.2	14.7		218.0	25	18	381	Mobile and Ohio	7,252,801	681,859	114,894	3,441,859	4,051,547	726,546	8,360,702	202.0	372,300	769,787	420,000			
23 Feb. '89	59.0	28.4			20	14	272	Montgomery and West Point.	1,819,403	279,435	100,000	1,419,672	922,621	18,956	2,462,492	116.9		446,153	211,880	6		
10 Dec. '89				295.8				North East and South West	728,000			105,700										
Tennessee and Ala. Central																						
ARKANSAS.																						
				301.4				Cairo and Fulton														
30 Nov. '88	38.5			107.5				Memphis and Little Rock	553,877	*		351,524	446,000	10,725	811,949							
CALIFORNIA.																						
30 Sep. '89	22.5			41.8				Sacramento Valley	1,547,100	*		791,100	756,000		1,547,100	22.5		211,420	115,076			
CONNECTICUT.																						
31 Jan. '89	23.9				3	6	30	Danbury and Norwalk	333,237	49,773		279,050	85,000	3,502	404,622	23.9		56,044	20,618	6		
30 Sep. '89	122.4			75.1	16	20	250	Hartford, Provid. and Fishkill	3,903,455	302,511		1,936,740	1,510,500	319,443	4,823,922	122.4	246,523	333,500	152,777			
31 Aug. '89	61.4							Hartford and New Haven	3,098,018	254,000	102,889	2,350,000	964,000	16,463	3,932,432	72.0	814,763	723,460	204,134	10	125	
31 Dec. '88	74.0				11	18	212	Housatonic	2,438,847		8,659	2,000,000	278,500	76,675	2,555,837	159.0		271,273	66,330			
31 Dec. '88	57.0				7	15	178	Naugatuck	1,578,301	*		1,031,800	437,550	30,713	1,706,802	57.0		199,536	314,068			
30 Nov. '88	62.8							N. Haven, N. London and Ston.	1,470,661	*	11,050	738,538	750,000		1,488,538	50.1		76,758	8,946			
30 Dec. '88	46.4	8.8						New Haven and Northampton	1,400,000	*		922,500	500,000		1,481,738	55.2		158,652	loss	5		
30 Nov. '88	66.0							N. Lond., Willimant. & Palmer	1,561,241	*	5,453	510,900	1,055,600	272	1,575,147	66.0	91,134	104,644	30,512			
31 Mar. '89	62.2	63.8			29	72	368	New York and New Haven	4,579,879	661,547		3,000,000	2,219,000	33,038	5,682,431	74.0	432,024	828,692	315,832	3		
31 Mar. '88	59.0	7.0						Norwich and Worcester	2,245,406	176,792		2,522,300	324,130	59,614	2,598,672	66.0		265,417	44,587	37		
DELAWARE.																						
31 Dec. '88	71.0			19.4				Delaware	1,146,311	*		252,561	735,000	123,750	1,146,311	71.0		66,628				
30 Nov. '88	14.3							Newcastle and Frenchtown	699,514		25,000	762,320			767,278	14.3		19,895				
FLORIDA.																						
								Florida														
30 Apr. '88				45.1				Florida and Alabama	292,291	*		317,847	154,000	70,620	543,237							
30 Jun. '89	31.8			28.6	2	1	24	Flo., Atlantic and Gulf Central	396,310	28,608		205,781	204,600	164,070	594,836	19.3		10,255	1,504			
	26.5	3.9		227.0				Pensacola and Georgia								20.4						
GEORGIA.																						
31 July '88	86.7				15	11	105	Atlanta and La Grange	1,179,381	*		1,000,000	187,500	23,384	1,459,075	86.7		362,061	197,357	8	125	
	30.0				133.5			Atlantic and Gulf—M. Trunk								30.0						
31 Dec. '87	53.0							Augusta and Savannah	1,032,200	*		733,700	298,500		1,032,200	53.0		125,427	69,679			
30 Apr. '89	43.5				23.7			Brunswick and Florida	755,000	*		151,887				31.0						
30 Nov. '89	191.0				54	28	636	Central of Georgia	3,750,000	*	826,171	3,750,000	106,267		5,977,106	229.0	790,030	1,633,947	839,604	10		
31 Mar. '89	171.0	61.0						Georgia (and Bank)	4,174,492	*	829,550	4,150,000	373,000		7,368,665	232.0	1,154,621	544,363	3	100		
30 Nov. '89	102.5				18	16	171	Macon and Western	1,500,000	*		1,438,800	23,000	7,101	1,967,776	102.5	213,180	375,250	209,785	11	106	
31 July '89	60.0				7	2	107	Museogee	774,244	162,534		669,950	249,000		1,026,868	50.0						
1 May '88	68.1				3	4	33	Savannah, Albany and Gulf	1,386,634	52,373		1,275,901	10,200	180,621	1,473,140	71.6						
31 July '89	106.1	56.5	14.8		15	18	166	South Western	3,165,000	*		2,254,000	631,000		3,165,000	147.2	171,758	547,876	337,769			
30 Sep. '89	138.0				52	24	706	Western and Atlantic	5,901,497	*		built and own'd by State.				138.0		832,343	454,541			
ILLINOIS.																						
	220.0							Chicago, Alton and St. Louis	10,000,000			3,500,000	4,500,000		10,000,000	220.0						
30 Apr. '89	138.0				62	31	990	Chic., Burlington and Quincy	6,088,054	1,400,872	680,158	4,629,340	2,990,000		8,149,084	210.0		1,044,573	171,515			63
31 Dec. '88	45.0				6	14	101	Chicago and Milwaukee	1,799,894	67,869	120,000	988,000	762,865	188,085	2,050,065	45.0	14 mo.	243,282	135,284			
	138.0				75.0			Chicago and Northwestern	2,500,000			4,250,000	6,550,000	13,330,000	13,330,000	138.0						
30 Jun. '88	181.8				58	57	980	Chicago and Rock Island	6,776,119	*	175,165	5,603,000	1,397,000	5,651	7,543,104	228.4		1,407,846	629,029			64
10 Nov. '88	53.2							Fox River Valley	580,000	*		580,000			580,000	84.0						
31 Dec. '88	121.0	138.5	73.6		60	63	1,369	Galena and Chicago Union	8,027,473	1,311,917	211,003	6,026,400	3,785,015	292,466	10,300,517	326.5	808,231	1,547,561	620,326	4	62	
	177.0							Great Western	5,022,926	*		1,600,000	3,088,426	334,500	5,022,926	175.0						
31 Dec. '88	454.8	252.5			113	96	2,395	Illinois Central	19,074,214	3,347,799		10,249,210	20,000,000	1,297,277	31,596,487	708.3		1,976,578	556,624			59
								Illinois River														
	148.0							Ohio and Mississippi	4,870,586	*		1,780,295	3,292,403			148.0						
	46.6							Peoria and Bureau Valley					600,000			oper. by Chic. & R. Ia.		125,000				
	186.0				129.0			Peoria and Hannibal								186.0						
	68.0							Peoria and Oquawka	5,400,000	*		1,569,889	2,200,000		186.0							
31 Dec. '88	100.0							Quincy and Chicago	1,978,555	*		800,000	1,200,000		2,000,000	100.0	oper. by Chic. & R. Ia.					
	1.0							Rock Island Bridge								oper. by Chic. & R. Ia.						
31 Dec. '88	168.5	39.8	12.2		31	30	424	Terre Haute, Alton & St. Louis	7,608,968	628,487		3,026,903	5,035,615	741,040	8,865,282	208.3		823,767				
INDIANA.																						
	108.0							Cincinnati and Chicago	2,080,433	*		1,196,679	1,006,125			108.0						
	29.0				73.0			Cincinnati, Peru and Chicago								29.0						
31 Aug. '87	109.0							Evansville and Crawfordsville	2,233,413		2,750	986,9										

An asterisk (*) occurring in the column headed "Rolling-Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A dash (-) signifies "nil." Running dots (....) signify "not ascertained." Land-Grant Railroads are in *italics*.

Price of shares.	Years ending.	Railroad.				Equipment.			Companies.	Abstract of Balance Sheet.										Earnings.				Price of shares.
		Main Line.	Lateral and Branch Lines.	2nd Track and Siding.	Road in progress or projected.	Engines.	Passenger.	Freight, etc.		Property and Assets.			Liabilities.			Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with train.		Gross.	Net.	Dividends.		
										Railroad and Appurtenances.	Rolling Stock.	Invested in foreign works.	Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.			M. M.	M.				\$	
		M.	M.	M.	M.	No.	No.	No.																
									MAINE.															
	Dec. '58	32.0			6.0	4		25	Androscoggin	645,271	*			145,787	511,500			32.0	22,001	30,967	17,263			
	May '59	55.0				9	10	128	Androscoggin and Kennebec	2,210,947		27,925	457,900	1,748,457	101,209	2,307,566	137.0	73,196	281,929	89,768				
	Jun. '59	149.0		25.0		41	17	349	Atlantic and St. Lawrence	6,066,375			2,494,900	3,472,000	9,572	6,976,472	149.0	429,791	545,741	150,226				
	Dec. '58	12.5				4	2	45	Bangor, Oldtown and Milford	175,232			135,000			175,516	12.5	25,437	33,069	16,536				
	Dec. '58	63.0	9.0			12	11	109	Kennebec and Portland	2,871,264			1,107,526	1,763,738			72.5	169,240	145,074	70,746				
	Dec. '58								Penobscot	308,413			180,000	143,678										
	May '59	54.7				4	10	93	Penobscot and Kennebec	1,611,413		104,019	555,228	1,206,800	128,576	1,890,604	54.7	oper. by	An. & K.	67,324				
	May '59	51.3				11	13	118	Portland, Saco and Portsmouth	1,494,792		5,208	1,500,000			1,500,000	51.3	141,664	208,299	104,022				
	May '59	37.0							Somerset and Kennebec	783,763			169,200	556,600			37.0		55,403	28,404				
	May '59	18.5			33.5				York and Cumberland	1,090,000			370,000	450,000	270,000	1,000,000	18.5							
									MARYLAND.															
	Sep. '59	279.6	7.2			235	124	3,272	Baltimore and Ohio	21,225,164	3,576,251	3,006,740	10,111,800	13,881,833	292,426	30,278,377	286.8	3,648,514	3,618,618	1,933,621				
	Sep. '59	30.0				7	33	167	Washington Branch	1,650,000			1,650,000			1,824,806	39.0	187,427	442,219	268,541				
	Dec. '58	138.0	4.0			42	38	1,455	Northern Central	6,943,457	733,934	220,965	2,260,000	5,895,800	655,507	8,681,587	154.6	606,482	810,604	364,049				
									MASSACHUSETTS.															
	Nov. '59	21.2		2.0		6	4	80	Berkshire	500,560	100,000		600,000		601,360	ope.								
	Nov. '59	28.8	1.8	43.6		21	26	566	Boston and Lowell	2,245,247	183,345		1,830,000	440,000	5,365	2,671,887	28.6	352,512	351,477	42,000				
	Nov. '59	74.3	8.8	51.3		30	43	600	Boston and Maine	3,846,883	373,057	105,937	4,076,974		4,522,460	83.0	640,372	820,119	394,476					
	Nov. '59	47.0	7.0	22.3		22	27	210	Boston and Providence	2,952,600	207,400	70,000	3,160,000	174,220	3,663,138	64.0	316,522	654,673	337,648					
	Nov. '59	44.6	24.0	59.2		30	58	380	Boston and Worcester	4,291,164	437,416	100,000	4,500,000	500,000	5,000,000	29,595	6,751,512	63.7	611,046	1,067,071	311,525			
	Nov. '59	46.1	1.1	2.7		7	10	109	Cape Cod Branch	907,761	123,864		681,680	190,000	39,490	1,092,268	47.2	79,456	118,726	49,376				
	Nov. '59	50.0	2.4	8.9		12	13	331	Connecticut River	1,614,385	187,555		1,591,100	125,500		1,928,284	75.4	117,164	271,592	138,228				
	Nov. '59	44.1	30.5	24.4		55	46	368	Eastern	4,134,575	456,424	250,000	2,855,400	2,030,500	60,510	4,944,400	120.7	426,161	693,400	325,805				
	Nov. '59	19.9	1.3	3.6					Essex	742,592	4,416		299,107	200,261	197,428	776,796	ope.							
	Nov. '59	50.9	16.8	70.9		29	28	655	Fitchburg	3,190,851	350,149		3,540,000	100,000		3,869,729	67.7	341,803	669,485	267,450				
	Nov. '59	14.0	2.4			3	3	37	Fitchburg and Worcester	293,658	40,226		214,296	62,900	300	333,884	26.4	37,245	48,768	12,795				
	Nov. '59	24.9							Hampshire and Hampden	577,582			200,000	100,000	57,065	363,158	ope.							
	Nov. '59	12.4	2.0			2	3	27	Lowell and Lawrence	332,583	30,275		600,000			698,563	60.0	153,374	229,205	68,510				
	Nov. '59	14.6		17.1		12	12	324	Nashua and Lowell	658,920	95,683		600,000		19,800	664,707	21.8	55,881	143,261	25,264				
	Nov. '59	20.2	1.6	1.0		7	16	146	New Bedford and Taunton	494,343	52,644		220,240	221,000	211,693	653,533	36.0	75,866	51,338	14,087				
	Nov. '59	26.9		2.3		5	9	44	Newburyport	685,272	63,696		223,176	675,000	2,563	901,029	8.4	20,888	22,531					
	Nov. '59	8.6		23.4					N. York and Boston Air Line	673,302			3,015,100	134,500	60,900	3,930,269	87.3	410,591	646,765	306,413				
	Nov. '59	79.5	7.8	25.6		27	46	358	Old Colony and Fall River	3,025,445	334,503		450,000			450,000	13.6	32,480	48,355	27,000				
	Nov. '59	18.6		0.7		1	2	1	Pittsfield and North Adams	432,430	11,247		1,510,200	300,000		1,510,200	44.4	216,327	341,836	136,336				
	Nov. '59	43.4	1.0	14.9		12	14	384	Providence and Worcester	1,608,977	254,566		243,305	226,900	316	470,521	ope.							
	Nov. '59	16.9		1.7		3	3	1	Salem and Lowell	366,987	82,543		259,685	153,290	2,821	513,112	11.5	26,026	58,794	15,463				
	Nov. '59	11.6		0.4		2	7	17	South Shore	462,167	39,426		448,700			451,000	ope.							
	Nov. '59	21.9		1.0					Stockbridge and Pittsfield	448,700							ope.							
	Nov. '59	11.1	0.6	1.3		7	18	144	Taunton Branch	475,045			385,200	219,000	9,854	614,060	ope.							
	Nov. '59	6.1			36.5				Troy and Greenfield	475,045						3,516,865	77.0	107,478	246,798	106,317				
	Nov. '59	69.0	8.0	5.5		11	8	192	Vermont and Massachusetts	3,309,622	207,343		2,214,225	1,003,880		3,145,921	192.0	1,020,054	1,767,068	830,148				
	Nov. '59	156.1	17.3	106.8		72	47	1,149	Western (incl. Alb. & W.S. etc.)	9,934,566	1,096,713		5,150,000	6,125,520	208,726	13,457,921	158.0	1,020,054	1,767,068	830,148				
	Nov. '59	45.7		9.3		10	8	149	Worcester and Nashua	1,187,935	140,962		1,141,000	194,500	862	1,403,409	45.7	179,490	216,444	94,244				
									MICHIGAN.															
	1 Jan. '59	17.0			2.7	2	1	100	Bay de Noquet and Marquette	built and	equipp	ed by G.	R. Tr. R.	R. Co. of	Canada									
	Sep. '59	57.0							Chic. Detroit & Can. G.T. Juno.	8,270,623			2,329,155	4,707,500		9,008,369	188.0		365,038	144,270				
	1 Jan. '59	185.0							Detroit and Milwaukee	647,596														
									Flint and Pere Marquette															
	May '59	284.0			183.0	98	123	1,528	Grand Rapids and Indiana	12,847,238	*	1,149,069	6,057,840	8,264,063	119,089	14,548,411	329.0		2,417,915	886,697				
	1 Mar. '59	246.0	293.0			91	135	976	Mich. St'n & N'n Indiana	14,517,892	807,906	1,312,534	8,975,400	9,343,000	816,460	19,505,407	589.0		2,019,425	777,273				
									Port Huron and Milwaukee															
									MINNESOTA.															
	'59					620.0			Minnesota and Pacific					600,000										
	'59					175.0			Southern Minnesota					575,000										
	'59					112.5			Minneapolis and Cedar Rapids					600,000										
	'59					200.0			Minnesota Transit					500,000										
	'59					60.0			Root River Valley						191,130									
									MISSISSIPPI.															
	1 May '59	145.5			41.7	11	6	155	Mississippi Central	3,355,965	*		1,641,947	1,346,363	383,129	3,717,469	145.5		239,585	117,871				
	1 Oct. '59	71.4			27.8	7	4	41	Mississippi and Tennessee	1,254,894	159,018		798,285	456,949	275,060	1,974,444	69.7		176,462	116,433				
	Dec. '58	83.2			60.4				Southern Mississippi	2,760,000	*		1,000,000	1,400,000			83.2		250,047	121,669				
									MISSOURI.															
	Nov. '58	12.0			65.8	1			Cairo and Fulton	281,645	9,200		50,493	327,000	50,892	128,386	12.0							
	Aug. '59	206.8							Hannibal and St. Joseph	10,147,007	814,301		1,770,612	8,768,000		10,961,308	206.8	14 mo's	497,269	235,321				
	Oct. '58	168.8			68.0				North Missouri	5,396,527	235,994		2,620,000	3,250,000	48,006	6,018,106	168.0		266,159					
									Platte County															
	Feb. '59	163.0	19.0		119.0	26	26	412	Pacific	8,621,659	614,782		3,330,657	8,203,000	754,837	12,288,494	182.0		676,310	301,503				
	Sep.																							

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An asterisk (*) occurring in the column headed "Rolling Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A dash (-) signifies "not reported." Running dots (....) signify "not ascertained." Land-Grant Railroads are in *italics*.

Years ending	Railroad.			Road in progress or projected.	Equipment.			Companies.	Abstract of Balance Sheet.										Earnings.					
	Main Line.	Lateral and Branch Lines.	2d Track and Sidings.		Engines.	Passenger Cars.	Freight, etc.		Property and Assets.				Liabilities.				Balance Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trains.		Gross.	Net.	Dividends.	Price of shares.
									Railroad and Appurtenances.	Rolling Stock.	Invested in foreign works.	Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.	M.	M.			\$	\$				
30 Sep. '59				140.0				New York.	406,952				404,950			31,135	436,085	32.9	93,804	84,119	11,215			
30 Sep. '58	32.9		3.3		5	12	53	Albany and Susquehanna	1,557,502	136,038		439,005	1,575,099	50,000		2,302,842	32.9	93,804	84,119	11,215				
30 Sep. '57	38.5		34.0					Albany and Vermont	2,392,984			1,000,000	1,832,984			2,392,984	37.5	98,838	62,941	32,952				
30 Sep. '56	34.9	2.0		73.6	4	6	39	Albany and West Stockbridge	1,158,148	81,405		804,645	700,000	8,158		1,512,806	14.5	20,647	26,858	13,439				
30 Sep. '55	14.8		1.6					Black River and Utica	498,681			250,000	220,000			250,000	235.0	487,588	541,249	172,321				
30 Sep. '54	142.0		13.6	18.5	28	32	386	Buffalo and Corning	3,150,762		164,200	680,000	2,692,221	252,142		4,206,709	87.8	370,488	848,327	419,378				
30 Sep. '53	68.8		18.0		28	34	312	Buffalo, New York and Erie	2,407,255	312,736	449,000	1,934,560	1,049,000	161,263		1,098,000	34.6	61,435	69,265	10,308				
30 Sep. '52	24.0		38.1					Buffalo and State Line	1,067,629	37,971		687,000	411,000		450,000	oper. by N. Y. & E. R.	24,000	30,000						
30 Sep. '51	17.4		2.1					Cayuga and Susquehanna	400,000			380,000	70,000		500,000	oper. by R. R.								
30 Sep. '50	46.8		2.9		10	8	83	Chemung	500,000			500,000			500,000	oper. by R. R.								
30 Sep. '49				63.2				Elmira, Jefferson & Canand.	287,357			352,741	14,000		23,716	63,803	17.3	67,065	63,803	11,999				
30 Sep. '48				15.0				Errie and New York City	329,225			175,000	165,000		62,500	329,225	150.0	700,224	1,842,636	770,996				
30 Sep. '47					4	3	50	Genesee Valley	148,000	27,000		3,765,466	8,842,000	414,644			101.5	248,123	384,195	147,084				
30 Sep. '46	17.3		0.5		52	107	542	Hudson and Boston (West'n)	10,206,906	1,182,372		2,715,186	870,000	115,856		2,587,270	655.9	40,366,005	6,200,848	2,791,419				
30 Sep. '45	144.0		106.5					Hudson River	74,203			1,852,711	24,000,000	14,333,771		2,074,798	38,401,300	4,282,149	1,404,837					
30 Sep. '44				182.0				L. Ontario, Auburn & N. York	3,497,538	178,320		2,211,659	354,611		1,856,977	101.5	248,123	384,195	147,084					
30 Sep. '43				8.5	18	37	129	L. Ontario and Hudson River	25,164,015	3,257,077	558,980	24,000,000	14,333,771		2,074,798	38,401,300	4,282,149	1,404,837						
30 Sep. '42					219	104	2,763	New York Central	31,148,015	4,172,192	1,311,385	11,000,000	5,151,287	147,640		152.9	621,747	975,883	358,702					
30 Sep. '41					33	93	676	New York and Harlem	7,805,339	634,777		6,171,100	3,077,900	1,500,000		4,799,287	121.8	847,800	382,932	120,850				
30 Sep. '40					28	8	417	Northern (Ogdensburg)	4,097,208	702,079		3,395,129	1,000,000	213,500		10,875	35.9	69,759	109,152	60,829				
30 Sep. '39					7	6	44	Oswego and Syracuse	675,215	100,462		574,753	396,340	213,500		192,748	17.9	167,104	100,047	47,571				
30 Sep. '38					6	4	33	Potsdam and Watertown	1,627,972	67,584		1,560,388	665,419	911,000		1,769,167	75.4	107,046	100,047	47,571				
30 Sep. '37					6	13	70	Rensselaer and Saratoga	745,968	157,057		610,000	140,000		901,025	48.2	61,900	285,902	108,769					
30 Sep. '36				32.6				Rochester and Genesee Valley	652,151	17,716		557,560	150,000	23,496	731,056	18.4	135,000	44,220	24,661					
30 Sep. '35					2	3	32	Sacketts Harbor and Ellensburg	871,556	1,170		167,485	278,400	56,810		18.0	17,620	12,025						
30 Sep. '34					2	3	30	Saratoga and Schoenectady	480,844			300,000	85,000		385,000	oper. by R. R. & S. R.	30,150							
30 Sep. '33					9	12	84	Saratoga and Whitehall	520,518	74,904		600,000	395,000		895,000	54.5	107,506	154,099	7,493					
30 Sep. '32				13.2				State Island	114,015			50,603	41,200	22,686	114,489									
30 Sep. '31								Brooklyn and Jamaica	369,856			284,850	85,000			oper. by Long I.	37,560							
30 Sep. '30					13	12	117	Syracuse and Binghamton	2,851,292			1,200,130	1,643,126	146,079	2,989,335	81.3	176,273	196,402	112,155					
30 Sep. '29					7.7	10	6	Troy and Boston	1,366,826	143,687		604,911	808,500	247,676	1,659,087	51.0	194,921	218,659	103,010					
30 Sep. '28								Troy and Greenbush	294,131			275,000			294,731	oper. by Hud. R.								
30 Sep. '27								Troy Union	734,714			30,000	680,000		732,114	oper. by other Co's.								
30 Sep. '26					7	11	288	Watertown and Rome	1,839,787	319,715		1,498,500	685,000	66,683	2,249,183	96.8	219,230	362,994	154,752					
30 Sep. '25								NEW CAROLINA.																
30 Sep. '24								Atlantic and North Carolina	1,850,000			1,600,000	400,000			29.2								
30 Sep. '23								North Carolina	4,235,000			4,000,000				223.0								
30 Sep. '22								Raleigh and Gaston	1,240,241			973,300	126,300			97.0								
30 Sep. '21					22	20	144	Wilmington and Manchester	2,556,238		201,500	1,127,511	1,060,000	111,886	2,892,969	171.0								
30 Sep. '20					24	32	144	Wilmington and Weldon	2,869,223		107,000	1,340,213	791,055	102,391	3,114,954	171.0	323,069	477,554	235,201					
15 Mar. '19				43.0				Western North Carolina	190,793		4,700	290,212		70,860	364,072									
30 Sep. '18								OHIO.																
30 Sep. '17					17	12	206	Atlantic and Great Western	613,231			866,939		77,294										
30 Sep. '16					41	39	603	Bellefontaine and Indiana	3,008,919		11,000	1,879,370	1,274,828	39,028	3,370,281	118.2								
30 Sep. '15					22	28	438	Central Ohio	5,679,508	922,670	106,133	1,628,356	3,673,000	1,126,455	6,810,432	141.0								
30 Sep. '14								Cine., Hamilton and Dayton	2,648,266	504,892	26,500	2,155,800	1,411,000	32,618	3,650,710	60.3								
30 Sep. '13					62.1			Cine. and Indianapolis Jun.								37.0								
30 Sep. '12					31.0	16	10	Cine., Wilmington and Zanesv.				2,441,176	3,032,000	228,975		131.8	304,168	590,745	19,180					
30 Sep. '11					42	31	439	Cleveland, Columbus and Cine.	4,087,571	684,955	67,422	4,746,100	38,000	8,242	5,343,276	141.2								
30 Sep. '10					18.0	10	6	Cleveland and Mahoning	1,920,953			580,000	1,292,300	161,200	1,943,500	67.0	193,873	285,140	182,282					
30 Sep. '09					31	39	458	Clev., Painesville & Ashtabula	3,431,732	555,343	541,503	3,000,000	1,667,000	35,500	4,812,201	96.6	402,935	1,111,353	646,057	15,111				
30 Sep. '08					42			Cleveland and Pittsburgh	9,320,288			3,942,368	4,918,325	653,821	9,681,102	203.5	646,413	772,093	332,008					
30 Sep. '07					32	42		Cleveland and Toledo	6,729,056	458,194	258,424	3,343,812	3,842,720	358,065	7,566,918	188.6								
30 Sep. '06					53.0	6	99	Clev., Zanesville and Cine.	1,574,692			389,675	575,250	623,486		61.5	75,120	68,128	19,763					
30 Sep. '05					31.0	6	103	Columbus and Indianapolis	2,555,000			750,000	1,600,000	205,000		72.0	144,000	84,000	17,760					
30 Sep. '04								Columbus and Xenia	1,736,250	392,900	112,734	1,490,000	290,700	50,500	1,965,589	oper. by W. V. L. M.	170,795							
30 Sep. '03					72.0			Dayton and Michigan	3,746,000			1,620,000	2,126,000			72.0	144,006	124,559	66,779					
30 Sep. '02					6	3	87	Dayton and Western	380,282	104,912		289,692	700,000	90,482	1,080,174	36.6		125,940	66,253					
30 Sep. '01					47.0	3	2	Dayton, Xenia and Belpre	860,496			437,838	422,658			16.0	40,064	64,000	33,000					
30 Sep. '00					6	6	72	Easton and Hamilton	1,101,744	79,022	62,630	469,762	728,853	152,694	1,358,867	45.0	105,304	151,866	44,615					
30 Sep. '99					84.0			Fremont and Indiana																
30 Sep. '98					6		68	Greenville and Miami	688,000			800,000	473,000	75,000		47.0	60,901	63,141	13,573					
30 Sep. '97					84.0	1	2	Iron	172,830			118,865	60,000	3,965		13.0	24,000	31,126	10,460					
30 Sep. '96					39	32	602	Little Miami	3,451,179	785,817	438,557	2,981,293	1,899,000	34,196	4,709,137	138.0	637,853	1,200,499	341,591					
30 Sep. '95					33	26	623	Marquette and Cincinnati	9,517,551	1,115,662	574,000	8,477,706	7,405,917	1,754,220	13,202,262	195.4	556,752	374,198	45,452					
30 Sep. '94					48	34	628	Ohio and Mississippi	18,635,688			6,584,681	9,880,000	2,330,030	13,794,721	192.3		881,957	312,441					
30 Sep. '93					17	16	238	Pittsburg, Columbus and Cin.	4,772,951			1,908,736	2,400,000	466,215		125.0								
30 Sep. '92					39	27	365	Sandusky, Dayton and Cine.	3,988,154	605,900	197,967	2,697,090	2,134,000	439,261	5,508,357	205.9		577,958	211,894	</				

RAILROAD SHARE LIST

, including Mileage, Rolling Stock, etc., etc.

An asterisk (*) occurring in the column headed "Rolling Stock" signifies that the cost is included in that of "Railroad and Appurtenances." A dash (-) signifies "nil." A dash (---) signifies "not ascertained." Land-Grant Railroads are in "Italics."

Years ending.	Railroad.				Equipment.			Companies.	Abstract of Balance Sheet.										Earnings.				Price of shares.																		
	Main Line.	Lateral and Branch Lines.	2nd Track and Sidings.	Road in progress projected.	Engines.	Passenger Cars.	Freight, etc.		Property and Assets.			Liabilities.				Balance Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trains.	Gross.	Net.	Dividends.																				
									Railroad and Appurtenances.	Rolling Stock.	Invested in foreign works.	Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.																											
M.	M.	M.	M.	No.	No.	No.		\$.	\$.	\$.	\$.	\$.	\$.	\$.	\$.	M.	M.	\$.	\$.	P. c.	P. c.																				
PENNSYLVANIA, (Continued.)																																									
Nov. '59	43.0		3.1	99.5	4	4	43	Pittsburg and Connellsville	1,501,414	79,396		1,753,864	1,500,000	177,920	3,444,154	0.0		60,438																							
Nov. '59	467.5		53.3		96	80	1,059	Pittsburg, Ft. Wayne & Chicago	16,557,779	1,785,182	91,100	6,286,278	8,896,457	1,883,347	17,269,419	467.5	1,559,031	1,966,988	674,656		394																				
Sep. '59	41.0			11.0				Pittsburg and Steubenville	1,947,462			1,221,277	280,000																												
Sep. '59	64.0		3.0		7	7	26	Schuylkill and Susquehanna	1,258,700			1,258,700	97,000		1,355,700	54.0		34,501	29,604	34																					
Sep. '59	15.2	15.3	14.9					Schuylkill Valley	573,616			568,150			573,616	24.5			54,582																						
Nov. '59	28.0	5.0	3.3		4	1	445	Shamokin Valley & Pottsville	1,321,847			500,000	821,447		1,321,847	33.0		96,227																							
Dec. '59	148.0		20.0	140.0				Sunbury and Erie	6,393,712	107,252		4,509,920	4,369,070	861,271	10,169,869	148.0																									
Nov. '59	29.6	6.5	31.9		6	8	127	Tioga	703,349	85,932		97,550	396,000					53,072	47,007	6																					
Sep. '59	26.4		2.1		4	11	9	Westchester and Philadelphia	1,410,638	74,677		682,170	944,169	52,434	1,679,301	26.4		125,597	4,502																						
Mar. '59	78.0							Williamsport and Elmira	3,650,682	380,847		1,500,000	2,361,973	161,272	4,148,920			191,970	96,308		1																				
RHODE ISLAND.																																									
Aug. '58	60.0		2.0		9	13	84	N. Y., Providence and Boston	2,158,000			1,508,000	306,500		2,158,000	60.0	147,231	208,439	96,571	5																					
Nov. '58	13.6		0.5		8			Providence, Warren & Bristol	434,898	1,588		287,917	109,937	36,139		13.6	23,514	23,006	1,278																						
SOUTH CAROLINA.																																									
Dec. '58	13.2	1.5		182.4	2		29	Blue Ridge	2,126,539			1,916,515	217,577		2,134,092	13.2																									
Dec. '58	64.9		47.4		4	3	21	Charlotte and Savannah	801,615	34,372	250,000	706,365	186,266	197,905	1,099,536	51.9																									
Dec. '58	109.6				13	9	176	Charlotte and South Carolina	1,719,045			1,201,000	384,000			109.6		283,363	151,536	6																					
Jan. '59	40.3							Cheraw and Darlington	600,000			400,000	200,000			40.3																									
Jan. '59	143.2	21.3						Greenville and Columbia	2,439,769	324,161		1,429,008	1,145,000	345,546	2,919,554	143.2		341,190	125,871																						
Aug. '58	22.5							Kings Mountain	196,250			200,000			200,000	22.5																									
Jul. '58	32.0							Laurens	543,403			400,000	106,218		543,403	32.0			27,568	8,527																					
Feb. '59	102.0							North-Eastern	2,011,652			985,743	960,410	108,172	2,057,325	102.0		220,014	96,145																						
Dec. '58	186.0	106.0			62	59	790	South Carolina	5,617,384	1,103,130	374,000	4,179,475	2,770,463	193,086	7,701,337	242.0		1,501,008	820,511	7																					
Jul. '58	25.1		41.9					Spartanburg and Union								25.1																									
TENNESSEE.																																									
Dec. '58	30.0		1.8		12	10	171	Edgefield and Kentucky	857,947			333,204	612,000	60,000		30.0	29,845	9,359	7,486																						
Dec. '58	140.0		8.0		10	10	128	East Tennessee and Georgia	3,637,367			1,289,673	2,020,000	200,000		140.0		318,718	187,466																						
Dec. '58	130.3		6.1		36	33	128	East Tennessee and Virginia	2,310,033	168,264		586,654	1,902,000	390,407		130.3	150,142	297,806	149,167																						
Jan. '59	271.6	16.0	30.0	3.9	9	5	242	Memphis and Charleston	5,444,304	743,729	100,000	2,237,665	2,700,000	443,616		271.6	562,041	1,330,612	775,036																						
Jan. '59	100.0		30.6	55.3				Memphis and Ohio	2,559,287	141,144		570,000	1,361,000	145,000																											
Jan. '59	59.0		40.1		7	5	41	Memphis, Clarkesv. & Louisv.	2,000,000	100,500		298,721	740,000																												
Jan. '59	47.4		2.3		4	5	119	Mississippi and Tennessee	1,137,400			798,285	554,949	319,618		47.4	69,870	177,256	60,029																						
Jan. '59	34.2		7.0		12	2	81	Mississippi Central and Tenn.	892,710	82,908		317,447	632,500	22,369		34.2	30,065	23,808	13,892																						
Jan. '59	149.7	44.0	7.9		30	17	819	McMinnville and Manchester	563,807	56,816		144,894	406,000	5,000		149.7	117,896	675,832	310,199	3																					
Jan. '59	45.8		4.2	11.7	6	5	32	Nashville and Chattanooga	3,632,882			2,256,479	1,524,000	21,769		45.8																									
Jan. '59	30.0		0.6	8.0				Nashville and Northwestern				595,922	860,000	204,544		30.0	57,990	75,120	47,570																						
Jan. '59	32.0							Tennessee and Alabama	76,016	76,016		216,962	413,000	408,477			1,248																								
Jan. '59	58.0							Winchester and Alabama																																	
Jan. '59	43.0							Texas (all aided by State)																																	
Jan. '59	75.0							Buffalo Bayou, Braz. & Col'r do																																	
Jan. '59	25.0							Galveston, Houston & Henderson																																	
Jan. '59	28.0							Houston and Brazoria																																	
Jan. '59	90.7		8.6	19.6	7	8	181	Houston and Texas Central	1,132,747			1,270,123	835,000	128,206	1,601,443			76,958																							
Jan. '59	119.6		13.0		26	18	555	San Antonio & Mexican Gulf																																	
Jan. '59	62.0		3.4		10	6	201	Southern Pacific																																	
Jan. '59	119.0		20.0		42	28	885																																		
Jan. '59	47.0		2.8																																						
Jan. '59	23.7		0.7		4	4	54																																		
Jan. '59	54.0	10.5																																							
Jan. '59	41.3		122.1																																						
Sep. '58	75.8		63.6		9	8	216	Connect. & Passumpsic Rivers	1,492,194	42,000		1,408,018	36,188	89,131	1,534,194			125,699	65,554																						
Mar. '59	79.2							Manassas Gap	3,262,990	209,901		3,038,500	418,000	292,956	3,939,729																										
Sep. '58	103.5							Norfolk and Petersburg	2,106,066		10,500	1,511,000	489,110	209,923	2,222,168																										
Sep. '58	148.7	9.1	4.5		12	10	101	Northwestern Virginia	5,322,156			468,605	5,719,229				103.5	345,427	248,004	103.5																					
Sep. '58	123.3	10.1			19	13	279	Orange and Alexandria	3,040,636	374,998		1,981,167	2,316,879	285,532	6,225,015		97.6		288,297	157,571																					
Sep. '58	59.2	21.3			14	17	131	Petersburg and Lynchburg	988,791	192,940		883,200	127,427	34,344	1,313,057		80.5		410,166	201,344																					
Sep. '58	140.5	1.8			23	18	370	Petersburg and Roanoke	3,588,653			1,981,017	1,126,407	25,163	4,424,671		142.3	263,993	310,988	186,085	5																				
Mar. '58	75.1							Richmond and Danville	1,985,949		52,800	1,033,600	690,115	116,550	2,183,232		75.1		299,126	145,656	7																				
Apr. '58	22.2	2.7			10	16	192	Richmond, Frederick & Potomac	1,087,949			836,100	201,408	34,681	1,250,186		24.9	79,921	157,542	82,486	6																				
Sep. '58	83.3		14.3		2	1	12	Richmond and Petersburg	688,190	22,810		657,812	86,000		742,812		24.0																								
Sep. '58	80.0				10	11	169	Richmond and York River	1,360,988		33,700	644,000	473,940	59,776	1,449,037		80.0	</																							

*) signifies that the road is in the hands of receivers. (t) that the company is in default in its interest. "S. F." Sinking Fund. "var.," that the bonds fall due at different periods.

Description.	Amount.	Interest.	Due.	Price.	Description.	Amount.	Interest.	Due.	Price.	Description.	Amount.	Interest.	Due.	Price.
Alabama and Florida :					Chicago and Milwaukee :					Eaton and Hamilton :				
Mortgage	\$300,000	7	1867		1st Mortgage (convertible)	\$512,000				1st Mortgage	\$757,734	†	Var.	
Convert. (guar. by Dir.)	150,000	7	1863		Income	62,000				Erie and North E.				
Land Mortgage	23,500	7	1869		Real Estate 2d Mortgage	188,864		1868		Exchanged for Buff. and St. L.	149,000			
Alabama and Miss. Rivers :					Chicago and Rock Island :					Evansville and Crawfordsville :				
State (Ala.) Loan	123,171				1st Mortgage	1,897,000	7	1870	91½					
Mortgage	109,500				Chic., St. Paul and Fond du Lac :					Florida :				
Alabama and Tenn. Rivers :					1st Mortgage (on 1st Division)	3,000,000	7			Internal Improvement (State)	1,855,000	7	1861	
1st Mortgage convertible	526,000	7	1872		2d Mortgage (1st Land Grant)	5,000,000	18			Free Land, 2d Mortgage	1,500,000	8	1861	
2d Mortgage	225,705	8	1864		Real Estate	350,000	18			Florida and Alabama :				
Albany, Vt. and Canada :					Cincinnati, Hamilton and Dayton :					Internal Improvement (State)				
1st Mortgage	500,000	7	1867		1st Mortgage	461,000		1867	92½	Free Land, 2d Mortgage				
Albany and West Stockbridge :					2d Mortgage	950,000		1880	84½	Florida, Atlantic and Gulf Centr.				
Albany City (S. F.)	1,000,000	6	'66-'70		*Cincinnati, Wilm. and Zanesville :					Internal Improvement (State)	300,000	7	1791	
Androscooggin and Kennebec :					1st Mortgage	1,200,000				Free Land, 2d Mortgage	200,000	8	1791	
1st Mortgage (Coupon) '60-'64	1,000,000	6	'62-'64		2d Mortgage	574,000				Internal Improvement (State)	300,000	7	1791	
Stock, convert. (Coupon)	710,000	6	'63-'66		3d Mortgage	158,000				Free Land, 2d Mortgage	200,000	8	1791	
Atlantic and St. Lawrence :					Income	250,500				Fox River Valley :				
Dollar Bonds (Coupon)	988,000	6	1866		Tunnel Right	1,000,000				1st Mortgage	400,000	†		
Sterling Bonds (Coupon)	484,000	6	1878		Cleveland and Mahoning :					2d Mortgage	180,000			
City of Portland Loan (Coup.)	1,500,000	6	'68-'70		1st Mortgage	604,500				Galena and Chicago Union :				
Baltimore and Ohio :					2d Mortgage	469,000				Litchfield	52,015	7	1859	
Maryland Sterling	3,000,000	5			3d Mortgage	85,800				1st Mortgage (S. F.)	1,993,000	7	'62-'63	92
Mortgage Coupon	2,500,000	6	1885	83	Clev., Painesville and Ashtabula :					2d Mortgage (S. F.)	1,738,000	7	1875	90
"	700,000	6	1880	89	1st Mortgage	564,000	7	1861	98					
"	1,128,500	6	1875	83	2d Mortgage	303,000	7	1862		*Great Western, Ill. :				
"	1,000,000	6	1867		Special (Sunbury and Erie)	500,000	7	1874		1st Mortgage (W. Div. 100 m.)	1,000,000	10		
Balt. City Loan	5,000,000	6			Convertible Scrip	300,000	7	1880		1st M. (E.D. 84 m.), 2d M. (W.D.)	1,350,000	7		
Bellefontaine and Indiana :					Cleveland and Pittsburg :					Old Sang. and Morg. Railroad	41,000			
1st Mortgage convertible	791,000	7	1866	55	1st Mortgage (Main Line)	800,000	7	1860	67	2d Mortgage	323,000			
2d Mortgage	140,000	7	1870		2d Mort. (M. L.) or 1st Extension	1,188,000	7	1873	60	Chattel (Equipment) Mortgage	374,426			
Real Estate (1861, '63, '68)	129,000	7	var.		3d Mort. (M. L.) or 2d Extension	1,165,000	7	1875		Greenville and Columbia :				
Income (S. F.)	199,500	7	1859		4th Mort. (M.L.) or 3d Extension	1,154,000				1st Mortgage, Coupon	1,145,000			
Belvidere Delaware :					Income	118,000				Hannibal and St. Joseph :				
1st Mort. (guar. C. and A.)	1,000,000	6	1877		Dividend Bonds and Scrip.	491,825				Missouri State Loan (1st Lien)	3,000,000	6	20430	
2d Mortgage	445,500	6			Cleveland and Toledo :					Land Security	5,000,000	7		59½
Cand. and Amb. R.R. Co.	244,000	6			Junction 1st Mortgage 1st Div.	377,000	7	1867		2d Mortgage (convertible)	757,000	7		
Black River and Utica :					Junction 1st Mortgage 2d Div.	305,000	7	1872	56	Plain	11,000	7		
1st Mortgage	370,000	7	1869		Junction 2d Mortgage	324,000	7	1862		Harrisburg and Lancaster :				
Boston, Concord and Montreal :					Tol., Nor. and Clev. 1st Mort.	622,000	7	1863	72½	New Dollar Bonds	459,872	6	1883	96½
1st Mortgage	200,000	6	1870		Tol., Nor. and Clev. 2d Mort.	299,600	7	1863	72½	Hartford and New Haven :				
2d Mortgage	300,000	7	1870		Junction Income	61,500	7	1862		1st Mortgage	1,000,000	6	1873	97
3d Mortgage Coupons	150,000	6			C. and T. Income	192,950	7	1863	62½	Hartf'd, Providence and Fitchkill :				
4th Mortgage Coupons	200,000	7			C. and T. Income (convertible)	409,900	7	1864						
Sinking Fund	200,000	6			C. and T. Income (convertible)	378,000	7	1864		Houston and Texas Central :				
Boston and Lowell :					C. and T. Dividend (convert.)	199,735	7	1865		State (1st Lien) Loan	210,000			
Mortgage	440,000	6	1873		C. and T. Income (convertible)	129,000	7	1870		Mortgage	125,000	7	1866	
Boston and Worcester :					C. and T. (S. F.) Mortgage	640,000	7	1885	71	Hudson River :				
Mortgage (plain)	100,000	6	1860		Junction (Lloyd's)	5,000	7	1862		1st Mortgage	4,000,000	7	'69-'70	104½
Mortgage (convertible)	500,000	6	1860		*Cleveland, Zanesville and Cin. :					2d Mortgage	1,980,000	7	1860	80½
Buffalo and State Line :					*Columbus, Piqua and Indiana :					3d Mortgage	1,840,000	7	1875	82½
1st Mortgage	500,000	7	1866	90	Columbus and Xenia :					Convertible	1,002,000	7	1877	77
Income (¾ in '69, ¼ in '62)	200,000	7	var.		1st Mortgage	18,000		1859		Illinois Central :				
Unsecured	200,000	7	1864		Dividend (due 1860, '61, '62, '66)	272,700		var.		Optional Right Scrip.	65,000	7	1868	60½
Erie and North-East	149,000	7			Connecticut River :					Construction	12,888,000	7	1875	89½
Burlington and Missouri :					Mortgage (due 1862, '63, '78)	263,000	6	var.		Construction	4,118,000	6	1875	88½
1st Mort. on 1st Division	590,000				Connectic't and Passump. Rivers :					Free Land	3,000,000	7	1860	96½
Burlington Loan	75,000				1st Mortgage	800,000				Indiana Central :				
Cairo and Fulton (Mo.)					Cumberland Valley :					1st Mortgage (convertible)	600,000	7	1866	
State (Mo.) Loan	650,000	6	'78-'79		1st Mortgage	116,500				2d Mortgage	254,500	10		
Canden and Amboy :					2d Mortgage	97,000				Income	251,500	10		
Mortgage	367,000	6	1864		Dauphin and Susquehanna :					Indianapolis and Cincinnati :				
Mort. (obgd from Sterl'g)	888,000	5	1864							1st Mortgage	500,000	7	1866	
Mortgage	800,000	6	1849		Dayton and Michigan :					2d Mortgage	400,000	7		76
Mortgage	1,700,000	8	1875	87½	Dayton and Western :					Real Estate Mortgage	200,000	7	1853	
Sterling (\$230,000)	1,008,000	5	1864		1st Mortgage	300,000				Dividend	86,284	7		
Sterling (\$225,000)	1,080,000	6	1864		2d Mortgage					Income and Domestic	176,000		var.	
New Loan (iss'd \$337,000)	2,500,000	6	1887		Delaware :					Indianap., Pittsb. and Cleveland :				
Unsecured	800,000	6	1863		1st Mortgage	500,000				1st Mortgage	167,000			
Catawissa, Williamsap. and Erie :					Guaranteed	65,000				2d Mortgage	168,000			
1st Mortgage	1,500,000	7	1885	32	State Loan	170,000				Domestic	34,200			
2d Mortgage	399,036	7	1886		Delaware, Lackawanna and W'n :					Jeffersonville :				
Chattel Mortgage	380,000	10	1871		1st Mortgage	900,000		1871		City of Keokuk, 20 years	289,000			
Cayuga and Susquehanna :					1st Mortgage (E. Extension)	1,500,000		1875	98½	2d Mortgage	392,000			
1st Mortgage	300,000	7	1865		2d Mortgage	2,600,000		1881	95	*Kennebec and Portland				
Unsecured	89,000	7	1862		Income (due 1862, '65 and '67)	1,263,170		var.	87½	1st Mortgage (City and Town)	800,000	6	1870	
Central of Georgia :					Detroit and Milwaukee :					2d Mortgage	230,000	6	1861	
Mortgage	106,267	7	1863		1st Mortgage (convertible)	2,500,000	7	1875		3d Mortgage	250,000	6	1862	
Central of New Jersey :					2d Mortgage	1,000,000	8	1866		*Kentucky Centr. (Cov. and Lex.)				
1st Mortgage	1,500,000	7	var.		3d Mortgage (convertible)	750,000	10	1863		1st Mortgage	160,000	6		
2d Mortgage	1,500,000	7	1875		4th Mortgage (G. W. R. R.)	500,000	8			2d Mortgage	260,000	7		
Income	375,000	7	var.		Dubuque and Pacific :					3d Mortgage (convertible)	1,000,000	7		
Central Ohio :					New Construction	800,000	†			Guaranteed by Covington	200,000	6		
1st Mortgage	450,000	7	1861	35	Dubuque Western :					Cincinnati (exchanged)	100,000	6		
2d Mortgage	800,000	7	1864	35	1st Mortgage	344,000	†			Income (issued 1854)	400,000	10	1859	
2d Mortgage	800,000	7	1865		Eastern (Mass.)					Income (issued 1855)	210,000	6	1860	
3d Mortgage (S. F.)	950,000	7	1885		Income (due \$75,000 annually)	525,000	6	var.		Ken'y Ky. Centr. (Lex. and Danv.)				
4th Mortgage (S. F.)	1,365,800	7	1876		2d Mortgage (convertible)	710,000	5	1862		Keokuk, Ft. D. Moines and Minn. :				
Income (1855, '69 and '60)	1,172,200	7	var.		3d Mortgage (convertible)	445,000	6	1874	98	City of Keokuk, 20 years	400,000	8		
Income (iss. to Muskingum Co.)	100,000	7	1862		1st M. (State) \$75,000 a y'r after '65	500,000	5	var.		City of Keokuk, (special tax)	150,000	10		
Charleston and Savannah :					East Tennessee and Georgia :					Lee County, 20 years	150,000	8		
1st Mortgage (endorsed)	510,000	6			State, 1st Mortgage	970,000				Keokuk, Mt. Pleasant and Muscat.				
2d Mortgage	1,000,000	7			Endorsed by State of Tennessee	150,000				Lee County	150,000	8		
Cheshire :					Mortgage (ordinary)	790,688				City of Keokuk	200,000	8		
Mort. 1 00, '63, '75 and '77	786,400	7	var.		East Tennessee and Virginia :					Henry and Louisa Company's	50,000	8		
Chicago, Burlington & Quincy :					State, 1st Lien	1,002,000				Lehigh Valley :				
Consolidated 1st Mort.	1,660,000	8	1883		Endorsed by State of Tenness.	200,000				1st Mortgage	1,500,000	6		
Chic. and Aur. 1st Mort.	406,000	7	1867		1st Mortgage (after State)	100,000								
Ch. and Aur. 2d M. (S. F.)	303,000	7	1869		Redeemable in Stock	66,950								
Cent. Mil. Tr. 1st Mort.	400,000	7	1864											
Cent. M. T. 2d M. (Conv.)	281,000	8	1868											
Chicago, Alton and St. Louis :														
1st Mortgage														
2d Mortgage														
3d Mortgage														
4d Mortgage														

¹ signifies that the road is in the hands of receivers. (†) that the company is in default in its interest. "S. F.," Sinking Fund. "var." that the bonds fall due at different periods.

Description.	Amount.	Interest.	Due.	Price.	Description.	Amount.	Interest.	Due.	Price.	Description.	Amount.	Interest.	Due.	Price.
La Crosse and Milwaukee:					Montgomery and West Point:					Orange and Alexandria:				
1st Mortgage (Eastern Div.)	\$903,000	+			Alabama State Loan	\$122,622				State Loan	\$400,000			
2d Mortgage (Eastern Div.)	1,000,000	+			Mortgage (due 1860, '63 and '65).	350,000	6	var.		1st Mortgage	1,055,500	6		79
1st Land Grant (Western Div.)	4,000,000	+			Mortgage	450,000	8	1866		2d Mortgage	461,378	8		
2d Land Grant (Western Div.)	353,600	+		9	Muscoogee:					Pacific (Mo.):				
3d Mortgage (whole road)	1,700,000	+			1st Mortgage	249,000	7			State (Mo.) Loan	7,000,000	6		
Farm Mortgage	1,087,700	+			Nashville and Chattanooga:					State Loan (S. W. Branch)	2,800,000	6		
Unsecured Bonds	1,785,000	+			Mortgage (State endorsed)	1,500,000				Construction	4,600,000	6		
Lexington and Frankfort:					Chat. and Cleve. Subsc. (endors.)	150,000				Panama:				
Mortgage, due 1864, '69 and '74.	130,000	6			Not endorsed	24,000				1st Mortgage Sterling	1,250,000	7	1865	100
Little Miami:					*New Albany and Salem:					2d Mortgage Sterling	1,150,000	7	1872	
Cincinnati Loan	100,000				Crawfordsville	175,000	7			Convertible	27,000	7		
1st Mortgage	138,000	6		85	1st Mortgage	500,000	10			Pennsylvania:				
2d Mortgage	7,000	6			1st Mortgage	2,235,000	6			1st Mortgage (convertible)	4,905,000	6	1888	100
3d Mortgage	981,000	6			New Haven and Hartford:					2d Mortgage	1,928,000	6	1875	
Long Island:					Mortgage					2d Mortgage Sterling	1,539,840	6	1876	
State Loan (S. F.)	100,000	5	1876		Extension					State Works Bonds	7,400,000	5		
1st Mortgage	500,000	6	1870		N. Hav., N. Lond. and Ston'ton:					Pennsylvania Coal Company:				
Louisville and Frankfort:					Mortgage	450,000	7			1st Mortgage	600,000	7		
Louisville Loan	174,000				Mortgage	200,000	6			Penobscot and Kennebec:				
1st Mortgage	248,000				Extension	100,000	10			Bangor City 1st Mortg. (Coupon)	800,000	6	1874	
Louisville and Nashville:					New Haven and Northampton:					2d Mortgage (Coupon)	250,200	6	1876	
State (Tenn.), 1st Lien	300,000	6			1st Mortgage	500,000		1869		3d Mortgage (Coupon)	156,600	6	1871	
1st Mortgage	2,000,000				New Jersey:					Pensacola and Georgia:				
McMinnville and Manchester:					Company's (various)	711,000		var.	103	State Internal Improvement		7	35 y's	
State (Tenn.)	372,000	6			New London, Willim. and Palmer:					Free Land				
Mortgage	24,000	7			1st Mortgage	500,000	71			Peoria and Oquawka:				
Mortgage	10,000	6			2d Mortgage	300,000	61							
Madison and Indianapolis:					Income (convertible)	152,000	61			Peru and Indianapolis:				
State (Ind.) Loan					New London City	100,000	61							
Mortgage					N. Orl'ns, Jackson and Gt. North:					Petersburg:				
*Marietta and Cincinnati:					State (Miss.) Loan	155,000				Mortgage (due 1863 to 1872)	108,000	7	var.	
1st Mortgage (convertible)	2,500,000	71	1868		1st Mortgage	3,000,000	8	1886		Petersburg and Lynchburg (S. Side):				
2d Mortgage	2,000,000	71			N. Orl'ns, Opelous. and Gt. West:					State (Va.) Loan (S. F.)	800,000	7		
3d Mortgage	1,500,000	71			Louisiana State Loan	621,000				1st Mortgage (1869-70-75)	365,000	6	var.	
Sterling Income	333,000	4			New Orleans City Loan	1,500,000				3d Mortgage (1862-70-72)	378,000	6	var.	
Domestic	928,617		69-72		1st Mortgage (S. F.)	2,000,000	8	1889		Special Mortgage (1865-68)	175,000	6	var.	
Memphis and Charleston:					New York Central:					Last Mortgage (1861 to 1869)	135,500	8	var.	
State (Tenn.) Loan	1,100,000	6			Albany Loan—Alb. and Sch'dy.	127,000	5	1864	101	Phila., German'n and Norris'tn:				
1st Mortgage	1,600,000	7	1850		State Loan—Sch'dy and Troy	100,000	6	1867		Consolidated Loan	274,800			
Memphis, Clarkesv. and Louisv.:					State Loan—Rochester and Syr.	77,382	54	1861		Loan of 1842:	100,000			
State (Tenn.) Loan	910,000	6			State Loan—Buffalo and Roch.	55,300	64	1865		Philadelphia and Reading:				
Memphis and Ohio:					State Loan—Roch., L. and N. F.	298,000	7	1861		Mortgage	705,000	5	1860	994
State (Tenn.) Loan	1,340,000	6			Stock Subscription	785,000	6	1883	88	Mortgage	1,672,800	6	1860	994
Michigan Central:					Premium Consolidated Stock	8,000,000	6	1883	86	Mortgage (convertible)	880,000	6	1860	
1st Mortgage Sterling	467,489	6			Real Estate	221,000	6	1883		Mortgage (convertible)	184,000	6	1860	
1st Mortgage (convertible)	500,000	8		96	New Convertible	3,000,000	7	1864	1024	Mortgage	3,209,600	6	1870	80
Unconvertible	253,000	8			*New York and Erie:					Mortgage (convertible)	3,586,500	6	1866	73
1st Mortgage (convert.) Dollar.	3,831,000	8			1st Mortgage	3,000,000	7	1867	98	Lebanon Valley R. R. (convert.)	1,500,000	7	1886	674
1st Mortgage (S. F.), convertible	3,087,000	8		96	2d Mortgage	4,000,000	7	1859	85	Real Estate Mortgage	516,450		var.	
Mich. Southern and N'n Indiana:					3d Mortgage (convertible)	6,000,000	7	1871	77	Phila., Wilmington and Baltimore:				
Michigan Southern	993,000	71	1857	75	4th Mortgage (convertible)	3,729,000	7	1880	58	Mortgage Loan	688,929	6	1860	
Northern Indiana	985,000	71	1861		5th Mortgage	1,277,000	7	1883	75	Mortgage Loan	1,686,500	6	1884	
Erie and Kalamazoo	300,000	71	1862		Unsecured (convertible)	2,618,000	7	1871	29	Improvement	119,000	6	1863	
Michigan Southern	259,000	71	1863		Unsecured (convertible)	2,443,000	7	1862	29	Pittsburg and Connellsville:				
Michigan Southern	293,000	71	1863		Sinking Fund	2,193,000	7	1875	29	Pittsburg Loan	500,000			
Jackson Branch	203,000	71	1865		New York and Harlem:					Alleghany Co. Loan	750,000			
Goshen Air Line	1,335,000	71	1868		1st Mortgage	3,000,000	7	1873	97	Connellsville Co. Loan	100,000			
Detroit and Toledo	336,000	71	1876		2d Mortgage	1,000,000	7	1864	94	Mc Keesport Loan	100,000			
General Mortgage (S. F.)	2,468,000	71	1885		3d Mortgage	1,000,000	7	1867	79	Baltimore Loan	1,000,000			
2d Mortgage	2,175,000	71	1877	47	New York and New Haven:					Cumberland Loan	200,000			
*Milwaukee and Beloit:					1st Mortgage	311,000	7	1860		*Pittsburg, Ft. Wayne and Chicago:				
1st Mortgage	630,000	8			1st Mortgage	964,000	6	1866	96	1st Mortgage (O. and P.)	1,000,000		1865	
Milwaukee and Chicago:					1st Mortgage	930,000	6	1875		2d Mortgage (O. and P.)	750,000		1866	
1st Mortgage	400,000	8			N. York, Providence and Boston:					Income (O. and P.)	1,991,000		1873	45
2d Mortgage	200,000	7			1st Mortgage	331,000	6			Bridge (O. and P.)	199,500			
*Milwaukee and Horicon:					North Carolina:					1st Mortgage (O. and I.)	1,000,000		1872	
1st Mortgage	420,000	8			State Loan	2,000,000	6			2d Mortgage (O. and I.)	380,000		1873	
2d Mortgage	600,000	8			State Loan	1,000,000	6			1st Mortgage (F. W. and Chic.)	1,250,000		1873	
Farm Mortgage	150,000	10			North-Eastern (S. C.):					Real Estate (F. W. and Chic.)	498,000		1874	
Milwaukee and Mississippi:					1st Mortgage	700,000				Mortgage, Consolidated Comp'y	1,229,000		1887	
1st Mortgage (convertible)	74,000	101	1861		2d Mortgage	224,500				Pittsburg and Steubenville:				
1st Mortgage (convertible)	526,000	81	1862		Real Estate	35,910				Mortgage	800,000	+	1865	
1st Mortgage (convertible)	650,000	81	1863		Northern Central:					Platte County:				
1st Mortgage (convertible)	1,250,000	81	1877		Balt. and Susq. R. R. (Coupons)	150,000	6	1866		State (Mo.) Loan	300,000	6	1879	
South-West Branch	350,000	81	1866		Md. State Loan (B. and Susq.)	150,000	6			Potsdam and Watertown:				
2d Mortgage	600,000	101	1862	30	York and Cumberland 1st Mort.	175,000	6	1870		1st Mortgage	800,000	71	64-74	
Construction	500,000	71	1859		York and Cumberland 2d Mort.	25,000	6	1871		Quincy and Chicago:				
3d Mortgage	500,000	81	1862		York and C. guar. by Baltimore	500,000	6	1877		1st Mortgage	1,200,000		1873	
Mississippi Central:					N. C. Contract	292,300	6	1875		Racine and Mississippi:				
1st Mortgage	1,007,363	7			Construction	1,903,500	6	1885		1st Mortgage (Eastern Division)	680,000	+		
Income	91,200	10	1862		Northern (Ogdensburg):					1st Mortgage (Western Division)	757,000	+		
Tennessee State	45,000	6			1st Mortgage	1,500,000	71	1859		Raleigh and Gaston:				
Mississippi Central and Tenn.:					2d Mortgage	3,077,000	71	1861		Coupon	100,000		1862	
State (Tenn.) Loan	529,000	6			North Missouri:					Rensselaer and Saratoga:				
Income	95,500				State Loan	2,000,000	6			1st Mortgage		7	1863	
Mississippi and Missouri:					State Loan	2,000,000	6			Richmond and Danville:				
1st Mortgage (convertible)	1,000,000	7			State Loan	350,000	6			State (Va.) Loan	600,000			
2d Mortgage (S. F.)	400,000	8			North Pennsylvania:					Guaranteed by State	200,000		1875	96
Oaklousa Division	1,425,000	7			Mortgage	2,500,000			68	Mortgage (Coupon)	250,000		1859	
Land Grant	7,000,000	7			Chattel Mortgage	214,500	10			Registered	150,000		1860	
Mississippi and Tennessee:					Northern (N. H.):					Richmond, Fred. and Potomac:				
Tennessee State Loan	98,000	6	1885		Mortgage (due 1860, '64 and '74)	219,500		var.		Sterling (\$27,000)	324,000		1860	
Mississippi State Loan	202,799	6			Norwich and Worcester:					Convertible	54,500		1875	
1st Mortgage	171,000	7	1876		Mass. State Loan	400,000	6	1877		Dividend Certificates	35,900		1867	
Mobile and Ohio:					Mortgage	205,800	6	1880		Dividend Certificates	295,900		1869	
City (Mobile) Tax Loan	400,000	6			Mortgage	16,000	7	1860		Richmond and Petersburg:				
Tennessee State Loan	674,860	6			Dividend Scrip and Bonds	102,330	6	var.		Coupon	150,000		1875	
Alabama State Loan	389,410	6			Ohio and Mississippi (O. and Ind.):					*Rutland and Burlington:				
Income	759,415	8	1861		1st Mortgage	2,193,500	+	1858		1st Mortgage	1,800,000			
Income	354,723	8	1862		2d Mortgage	316,995	+			2d Mortgage	918,500			
Income	375,132	8	1865		Construction	4,637,929	+	1858		3d Mortgage	426,400			
Income	18,700	8	1867		Income	3,501,185	+	1858		Sacramento Valley:				
Sterling	878,085	6	1883		Ohio and Mississippi (Ill.):					1st Mortgage	400,000			
Mississippi State Loan	900,970	6								2d Mortgage	840,000			

AMERICAN RAILROAD BOND LIST.

For explanations see preceding pages.

Description.	Amount.	Interest.	Due.	Price.
Sandusky, Dayton and Cincinnati:				
Mortgage	182,000	10	1856	
Mortgage	997,000	7	1866	
Mortgage	1,000,000	7	1875	
Dividend	224,000	6	'60-'62	
Sandusky, Mansfield and Newark:				
1st Mortgage	1,290,000	7		
Saratoga and Whitehall:				
1st Mortgage	250,000	7	1856	
1st Mortgage (R. and W. Br.)	100,000	7	1856	
Unsecured	45,000	7	1856	
Seaboard and Roanoke:				
1st Mortgage	300,000		1860	
2d Mortgage	75,000		1870	
4th Mortgage	60,000		1856	
South Carolina:				
State Loan	200,000	5	1868	
Sterling	183,333	6	1863	
Sterling	2,000,000	5	1866	
Auditor's	248,500	7		
Southern Mississippi:				
1st Mortgage	500,000			
South-Western (Ga.):				
1st Mortgage	631,000		1875	
*Springfield, Mt. Vern. and Pittsb.:				
1st Mortgage	500,000			
2d Mortgage	450,000			
*Steubenville and Ind. (P. C. and C.):				
1st Mortgage	1,500,000			
2d Mortgage	900,000			
*St. Louis, Alton and Chicago:				
1st Mortgage	2,000,000	7		
2d Mortgage	1,535,000	7		
3d Mortgage (Income)	1,000,000	10		
St. Louis and Iron Mountain:				
State (Mo.) Aid	2,501,000			
St. Louis City Subscription	500,000			
St. Louis County Subscription	1,000,000			
Carondelet Subscription	50,000			
Sunbury and Erie				
Mortgage	1,000,000	7		
Mortgage	7,000,000	5		
Syracuse, Binghamton and N. Y.:				
1st Mortgage				65
2d Mortgage				50
3d Mortgage				36
4th Mortgage				1873
5th Mortgage				1869
6th Mortgage				1874
Tennessee and Alabama:				
State (Tenn.) Loan	514,000			
Mortgage	46,000			
Terre Haute and Richmond:				
1st Mortgage (convertible)	230,000	7	1860	
Toledo, Wabash and Western:				
1st M. (L. Er. Wab. and St. Louis)	2,500,000	7	1865	
2d M. (L. Er. Wab. and St. Louis)	1,000,000	7	1869	
3d M. (L. Er. Wab. and St. Louis)	1,200,000	7	1861	
Real Estate (L. Er. W. and St. L.)	300,000	7	1861	
1st Mortgage (Toledo and Ill.)	900,000	7	1865	
2d Mortgage (Toledo and Ill.)	800,000	7	1865	
3d Mortgage (Toledo and Ill.)	600,000	7	1865	
*Vermont Central:				
1st Mortgage				18
2d Mortgage				
Virginia Central:				
Mort. guaranteed by State of Va.	100,000	6	1880	
Mortgage	206,000	6	1872	
Mortgage (coupons)	941,000	6	1884	
Dividend, due 1865, '66 and '70	238,346	6	var.	
Income (1869 to 1868)	168,382	7	var.	
Virginia and Tennessee:				
State (Va.) Loan	1,000,000	6	1887	
1st Mortgage	500,000	6	1872	82
Fractional Mortgage	25,500	6	1868	82
2d or Enlarged	1,000,000	6	1884	80
Salt Works Br. Mort. due '68-'61	203,000	6	var.	
3d Mortgage (Income)	431,000	6	1865	79
Warren (N. J.):				
1st Mortgage	568,500		1875	
Watertown and Rome:				
Mortgage (new bonds)	800,000	7	1880	
Western (Mass.):				
Sterling (\$200,000)	4,319,520	5	'68-'71	
Albany City (Alb. and W. S.)	1,000,000	6	'66-'76	
*Western Vermont:				
1st Mortgage	700,000		1861	
Williamsport and Elmira:				
1st Mortgage	1,000,000	7	1890	
Wilmington and Manchester:				
1st Mortgage	596,000			
2d Mortgage	1,000,000			
Income	177,000			
Wilmington and Weldon:				
Mortgage, payable in England	443,555			
Sterling, issued in 1868	144,500			
Company's, endorsed by State	203,500			
Winchester and Potomac:				
Mortgage	120,000	6	1867	
York and Cumberland:				
1st Mortgage	898,000	7		

Railroad Reports.

RAILROAD COMPANIES will oblige us by sending us copies of their Reports as soon as they are published.

American Railroad Journal.

Saturday, May 5, 1860.

Railroads in New York.

We give in another column a statement, the first of a series, showing the share capital, debts, costs, earnings, etc., etc., of the Railroads of New York, commencing with the roads first opened, to be brought down to the present time. Having the means of presenting an historical view of the roads of the State, we believe we cannot fill our columns with more valuable matter, for one of the surest tests of present value of a road is its past history.

Milwaukee and Mississippi Railroad.

The committee of bondholders of this company have recommended the adoption of the following plan for the re-organization of this company. The plan is substantially as follows:

First mortg. on 1st section, 8 per cent. \$600,000
First mortg. on 2d section, 8 per cent. 647,000
Mortgage to Waukesha, 10 per cent. 74,000

Total \$1,321,000

The foregoing and accrued interest may be converted into 8 per cent. first preferred stock, or receive new sheets of coupons, at the option of the holders, running 10 or 15 years, bearing 8 per cent. First mortg. on 3d section, 8 per cent. \$2,037,000
First mortg. on Southern Wisconsin, 8 per cent. 346,000

Total \$1,883,000

The holders of the foregoing are to receive 8 per cent. first preferred stock for the principal and accrued interest, and, with the holders of the Second mortgages, as stated below, may take the control of the road.

Second mortgage 10 per cent. bonds \$600,000

The holders of the above are to receive Second preferred 8 per cent. stock for principal and interest, and, with the first preferred stockholders, will manage the road, elect directors, etc.

Second mortg. on the Southern Wisconsin Line to the city of Milwaukee is \$300,000
Third mortgage on the whole line, 7 and 8 per cent. 395,750

Total \$695,750

The above, with accrued interest, to be converted into Third Preferred 7 per cent. stock. A fourth class of stock, called Common stock, to be issued in discharge of all the stock now outstanding, and including Farm Mortgages unsecured indebtedness against the road. Under this organization, as authorized by a late law of the State of Wisconsin, the income of the road is to be appropriated as follows:

First: Pay running expenses.
Second: Pay interest on mortgages outstanding.
Third: Pay 8 per cent. on first preferred stock.
Fourth: Pay 8 per cent. on second preferred stock.

Fifth: Pay 7 per cent. on third preferred stock.
Sixth: The surplus, if any, to be employed in sinking the preferred stock to three millions, or until its value has reached par in New York.

Seventh: Whenever these conditions are reached, the surplus shall be invested in the purchase of the common stock, until the whole capital stock, both preferred and common, shall be reduced to six millions.

Eighth: When the capital stock shall have been reduced to six millions of dollars, and the road shall have earned a dividend on that amount in any one year, equal to 7 per cent. dividends shall be declared on all the stock, instead of sinking the shares.

Notices of Books.

"STRENGTH OF MATERIALS." By J. K. WHILDIN, C. E., Washington, D. C.; pp. 62, octavo. D. Van Nostrand, 192 Broadway, New York.

This is a small volume, compiling, in a convenient form for reference, the results of various experiments on the strength of materials, the records of which have heretofore been so scattered as not always to be obtainable. It contains many useful tables and formula from both old and new experiments, and the authorities are given. It is illustrated by diagrams and cuts. We hope this is but the beginning of a comprehensive collection of such data, for nothing is more required by the engineer and the mechanic, than a thorough "aide memoire" of this kind. The publisher's advertisement will be found in our advertising columns.

Michigan Southern and Northern Indian Railroad.

The following is a correct list of the new board of directors elected on the 25th ult.

Albert Havemeyer, Allan Campbell, Jonathan H. Ransom, Henry Keep, Milton Courtright, New York; Elisha M. Gilbert, Utica; Hamilton White, Syracuse; Nelson Beardsley, Auburn; William Williams, Buffalo; Stillman Witt, Cleveland; John S. Barry, Constantine Michigan; Philo Morehouse, Elkhart, Ind.; Martine L. Sykes, Jr., Chicago.

The above are mostly new members. At a subsequent meeting of the new Board of Directors, E. M. Gilbert was chosen President, and M. L. Sykes Vice-President. J. D. Campbell was re-appointed Superintendent.

Stock and Bond Markets.

The closing cash prices at the New York Stock Exchange for each day of the week ending 2nd May, 1860, were as follows:

	Th. 20.	F. 27.	Sat. 23.	M. 30.	Tu. 2.	W. 2.
FEDERAL STOCKS:—						
U. S. 5s, 1874	103	103	103	103	103	103
STATE STOCKS:—						
California 7s	90	90	90	90	90	90
Georgia 6s						
Illinois 5s	89	89	89	89	89	89
Indiana 5s	103	103	103	103	103	103
Kentucky						
Louisiana 6s						
Maryland 6s						
Michigan 6s	102	102	102	102	102	102
Minnesota 5s	83	83	83	83	83	83
Missouri	83	83	83	83	83	83
New York 5s, 1874	101	101	101	101	101	101
North Carolina 6s						
Ohio 6s, 1870	91	91	91	91	91	91
Tennessee 6s, 1860	91	91	91	91	91	91
Virginia 6s	93	93	93	93	93	93
RAILROAD SHARES:—						
Chicago and Rock Isl. 64	65	64	64	65	65	65
Clev. Palmsv. & Asht. 112						
Clev. and Toledo	29	29	29	29	29	29
Del. Lack. and West.						
Galena and Chicago	63	64	63	63	62	63
Hudson River	41	41	41	41	41	41
Illinois Central	59	60	59	59	59	59
Michigan Central	48	48	48	48	48	48
M. S. and N. L. guard	24	24	24	24	24	24
M. S. and N. L.	12	12	12	12	12	12
New York Central	79	79	79	79	79	79
New York and Erie	16	17	16	16	16	16
N. York and Harlem	13	12	12	12	12	12
N. Y. and H. "pref."	37	38	38	38	37	37
Pennsylvania	137	141	141	144	144	144
Phila. and Reading	42	42	42	42	42	42
MISCELLANEOUS:—						
Del. and Hud. C. Co.	98	98	98	98	98	98
Cumberland Coal Co.	14	14	14	14	14	14
Pennsylvania Coal Co.	83	83	83	83	83	83
Pacific Mail S. S. Co.	105	105	105	105	105	105
Canton	21	21	21	21	21	21
Brooklyn Water Wks.	102	102	102	102	102	102

The following are the closing prices in the London Market on the 21st April:

United States 5 p. c. red. '74.	91½	to	92½
Illinois Central 6 p. c. red. 1875.	75	to	77
Do. 7 p. c. red. 1875.	79	to	80
Do. do. Fr. L'd red. '60.89½		to	90½
Do. \$100 shares, \$60 p'd.42		to	42
Mich. Cen. 8 per cent. con. '60.	85	to	90
Do. do. 1869.	82	to	84
Do. do. 1st mortgage			
(sinking fund), 1882.	82	to	84
Do. \$100 shares.	35	to	40
Michigan S. & N. Indiana 7 per ct.			
(sinking fund) 1885.	55	to	65
Do. \$100 shares.	3	to	10
New York Central, 6 per cent. (sinking fund) 1883.	85	to	87
Do. 7 per cent. 1864.	92	to	94
Do. 7 per cent. (sinking f.) 1876.92		to	94
Do. \$100 shares.	68	to	70
New York and Erie 1st mortgage 7			
per cent. 1867.	89	to	91
Do. 2d mortgage, 1869.	80	to	82
Do. 3d do. 1883, assented. .69		to	71
Do. Bonds, 1862, '71, '75 do. .28		to	32
Do. Shares, assented.	10½	to	11½
Pennsylvania Central B'ds, 1st mort.			
conv. 6 per cent.	88	to	90
Do. 2d mort. 6 per cent. sterling. .89		to	91
Do. \$50 shares.	37	to	40
Phila. and Reading B'ds, 6 p.c., 1860.78		to	80
Do. 6 per cent. 1870.	70	to	75
Do. \$50 shares.	15	to	20

New Invention in Street Railways!!!

We took occasion a few weeks ago to call attention to a remarkable and characteristic discovery made by the *Railway Review*, viz: that a car, having wheels of unequal diameter, on the same axle, would be an improvement on one having wheels of the same size, (see article in *Railway Review* of Feb. 16th, headed, "Bartholomew's Reversible City Rail,") and we proposed to join in the exultation consequent upon the invention of so wonderful a contrivance for—*getting off the track*. Our neighbor, however, says we "overlooked" one important feature of the invention, viz: "the fact that one of Bartholomew's wheels is to run loose on its axle." The omission of a feature of the invention, without which the *Review* virtually admits the machine would operate precisely as we stated, is quite as remarkable as the invention itself.

We have carefully looked over the description and drawings which were published in the *Review*, and we are not willing to admit that we have "overlooked" anything, for we don't see a word said about this important feature.

The *Review* has, no doubt, "overlooked" the fact, that during the past ten years, at least twenty different plans for independent wheels have been patented, and that none of them have yet been found to succeed. We remember a contrivance of this kind, which the good nature of the managers of the Erie Railroad induced them to try several years ago, but not without many misgivings. However, to make the thing stay on the track, they put it in the middle of a freight train, so that it was steered "fore and aft." It behaved very well for a while, so long as the train was on the up grades; but as soon as a descent occurred, and the car was relieved from the tension of the draw irons, it bolted, carrying with it everything in the rear.

We looked upon this "reversible" invention, so elaborated by the *Review*, as most skillfully adapted to run off the track; but we must now ac-

knowledge that it was not so perfect as we at first thought—for, without the independent wheels, it would only run off on one side. It required the new feature which the *Railway Review* has just thought of, to perfect it, and it will now run off with equal facility on either side.

We now propose to laugh with our neighbor on both sides of the mouth, and to invite the "London Artisan" to join us, as according to the *Review*, all the "absurdities" of the *JOURNAL* are copied from that paper.

Lightner's Patent Railroad Axle-Box.

In the U. S. Circuit Court, a suit against the Second Avenue Railroad Company of this city, for the infringement of this patent, has just been terminated by a verdict against this company, for the amount claimed and cost. The validity of the patent was vigorously attacked by the defendants, but was fully sustained by the Court. In the defence were associated several eminent lawyers, acting in behalf of other companies.

Forrester's Patent Day and Night Shifting Car Seat.

We have no hesitation in calling the attention of Railroad Companies to this seat as more nearly approaching the desideratum of comfort than anything that has yet come to our notice. The seat per se is so arranged that a passenger can give it any desired inclination, and the back may be set at any angle between a perpendicular and a level. Under each seat is arranged a series of folding cushions, which are used by the passenger in the next seat in the rear. By a very simple process these are opened and spread out in connection with the seat, so that a passenger may adjust his couch in any desired form, and with any desired number of angles to suit the requirements of his tired frame. He has, in fact, an adjustable invalid chair at his command. As a day seat the folding cushions underneath give a rest for the feet, and can be adjusted to meet every emergency of length of limb.

The most comfortable arrangement of these seats in the car, is in three single lines with two aisles or passage ways, each passenger thus having a seat entirely to himself. Practically as many passengers would be carried in such seats as in double seats for every one seeks a seat by himself, and when possible occupies at least two, and oftentimes four. On the wide gauge cars, the proper arrangement would be a single row of seats on each side and a double row in the middle, with the two passage-ways. But they may be used with the double seats on each side, where deemed expedient.

The cost for the double seats is \$35; for the single seats, \$20 each. In these days of competition, our railway companies are beginning to recognize the necessity of giving their passengers something more than the sharp corner of a mahogany plank to lean their elbows on, and of covering the heads of the screws, with which it has heretofore been customary to torture them.

"Night cars" have been provided, in which, for a half dollar extra, the deluded traveler supposes he can sleep. But the straight hard cushions and the diminutive pillows are never used the second time, even if the passenger survives the foul and stifling atmosphere of one of these "black holes." What is needed is not a "sleeping car," but a car provided with luxuriously cushioned seats,

so constructed that their form may be changed, and the passenger be allowed to relieve himself from one fixed and inevitable position. Forrester's seat seems to fulfill the most rigid requirements, and we recommend it to the attention of our railway companies. It can be seen at the Railway Agency establishment of Gilead A. Smith, No. 207 Broadway, corner of Fulton Street.

Warwick Valley Railroad.

The Warwick Valley Railroad, a branch of the New York and Erie Railroad, extending from Chester to Warwick, is to be constructed immediately. The contract has been taken by A. P. ROBINSON, Esq., of this city, and THOS. EDSELL, Esq., of Goshen.

These gentlemen undertake to engineer and construct the road, finishing everything required. From the well known reputation of the first as a Civil Engineer, and the experience of the last as a contractor, the company have the best possible guarantee of the prompt and faithful fulfillment of this contract. The route is through one of the most populous and fertile valleys in the State. The whole line completed and in operation will cost less than \$175,000, and no doubt is entertained but that the road will be remunerative. The citizens of Newburg have taken much interest in it, as it is, in fact, an extension of the Newburg branch towards the New Jersey line.

Charleston and Savannah Railroad.

The completion of this road to the Savannah river is announced in the Savannah papers. It was opened through, and the trains commenced running on the 20th ult. The whole distance from Charleston to the river is 89 miles. Until the completion of the bridge, and the remainder of the track leading into the city is completed, passengers will be conveyed to Savannah by steamer. The distance by water is some 16 miles, occupying about one hour. We learn that the work is considerably advanced on the south side of the river, and will doubtless be completed by the time the river is bridged, which it is thought will occupy about a year more. The distance will then be reduced to about 13 miles—making the entire distance from Charleston to the Central Railroad depot in Savannah, 102 miles.

A pretty full account of the bridge has been given in a recent number. It is being constructed by the *Trenton (N. J.) Locomotive and Machine Manufacturing Company*. When completed, it will be one of the finest structures of the kind in the country.

We believe there is but one other bridge of the kind in the United States—that over the Pee Dee, on the line of the Wilmington and Manchester Railroad, a full description of which was given in the report of Col. Walter Gwynn, which was published entire in the *JOURNAL* of May 6, 1864. The cylinders, engine, air pump, etc., in this instance, were supplied by the *West Point Foundry*, Cold Spring, N. Y., of which R. P. PARROT, Esq., is the principal.

Contracts for two bridges, with foundations constructed in a similar manner, are to be built over the Mobile and Tensas rivers, on the line of the Mobile and Great Northern Railroad, contracts for which are already given out. The tubes in this case, as mentioned in our last issue, are to be sup-

piled by Messrs. JOHN ROBERTSON & Co., New Castle upon Tyne.

The great advantage in the use of cylinders, sunk, by the pneumatic process, in localities that forbid the laying of foundations in the old way, without great expense, must soon bring it into general use.

Detroit, Monroe and Toledo Railroad.

At the annual meeting of this company, held at Monroe, the following directors were chosen for the ensuing year: Ransom Gardner, T. G. Cole, Henry H. Brown, Nelson Beardsley, J. H. Ransom, E. M. Gilbert, M. L. Sykes, jr., J. S. Barry, H. Keep, Philo Morehouse and Stillman Witt.

The directors, at a subsequent meeting, elected the following officers; President, E. M. GILBERT; Vice-President, M. L. SYKES, jr.; Secretary and Treasurer, HENRY H. BROWN.

Large Caloric Engine.

The Bordentown Machine Company have recently completed a first-class sugar-cane mill for a gentleman of Cuba, which is now being attached to a twin 48-inch Ericsson caloric engine, manufactured by the Newark Machine Company, at their works at Newark. This is the largest caloric engine yet made of the new pattern, and is supposed to be powerful enough to do the work of the largest plantation. The twin 32-inch engine has been found in practice adequate to answer the purposes of the ordinary planters.

Androssoggin Railroad.

A meeting of the bond holders of the Androssoggin Railroad, was held in this city on Friday and Saturday last.—The holders of about two hundred thousand dollars of these bonds were present. Hon. William Willis was chosen Chairman, and Mr. Joseph Hsley, Secretary. A report was received and read, made by Jabez C. Woodman, Esq., who had been appointed by the bondholders to examine the affairs of the road. The officers and directors of the road were present, and after a full conference in the matter, an amicable arrangement was made to the following effect. The directors agreed to appoint a party satisfactory to the bondholders to receive the net earnings of the road, which are to be applied to the payment of certain debts due for iron on a portion of the road; and the bondholders on their part, consented to wait three months before proceeding to take possession of the road. Meantime a stockholder's meeting is to be held and negotiations completed to extend the road either to Gardiner or Bath, it being understood that the interest on the bonds is to be paid before the road is so extended.—*Portland Adv.*

Cincinnati and Chicago Railroad.

This road was sold on the 28th ult. at Commissioner's sale, by order of the United States Court, upon application of the English bondholders. The road was bid off at \$30,000. The purchasers were Pierre Choteau, Jr., F. C. Gebhard, U. A. Murdock, John H. Thompson, and Henry Morgan.

According to a statement recently put forth by the Vice President of this company, the stock issued amounts to \$3,000,000, which, together with the bonded debt and over-due interest and the floating debt, makes an aggregate of over \$6,000,000 indebtedness upon 108 miles of road, most of which is not ballasted, and the whole imperfectly stocked. This would give a total expense of about \$60,000 per mile. A cash basis, or something near it, would not have been over \$15,000 per mile.

That portion of the road between Logansport and Valparaiso is all graded and ready for the iron from the latter point to the Cass County line. That portion in Cass County can be completed, according to the Engineer's estimate, for \$12,000. We understand that it is the intention of the company to commence the laying of the rail at Valparaiso, and to have the portion in Cass County,

together with the bridge over the Wabash at Logansport, completed by the time the track-laying shall have reached Cass County.—*Cin. Inq.*

Henderson and Nashville Railroad.

We understand that a contract for building ten miles of the Henderson end of this road has been let to Messrs. Seabee & Campbell at \$90,000—the company to have the road graded and ready for the iron. Five miles are to be finished in five months and the other five in October.

Branch Road from Temple to Tuckerton.

A very pleasant excursion over the East Pennsylvania Railroad, took place on Wednesday last, with a view of inspecting the line, and especially noting the proposed branch road from Temple to Tuckerton, connecting the Schuylkill and Lehigh Valleys, thereby affording greatly increased facilities for the transportation of coal from the Schuylkill region to the great centre of commercial enterprise—the city of New York.

The excursionists, consisted of several of the leading coal operators, manufacturers, bankers and business men from Schuylkill, Berks, Lehigh and Philadelphia, including representative of the press, from Reading, Allentown, Pottsville, Minersville, etc.

The first stopping point was at the Temple Station, about six miles above Reading. It is at this point that the branch road is to diverge from the main line, and connect with the Reading road, at Tuckerton Station. The distance across is something less than two miles, over a level country, that will require little labor or expense in the way of grading and preparing the track. This branch, which is already surveyed, will cost only \$25,000, while the estimates of the proposed Auburn and Allentown road are a million and half of dollars; though it will probably cost double that sum. When we add that the advantage in point of, distance is only 12 miles, or about half an hour's running in favor of the Auburn and Allentown, the great folly of completing that expensive work will be sufficiently apparent. All the gentlemen present were impressed with the superior claims of the branch road, and gave it their hearty endorsement.—*Reading Journal, April 21.*

The Montgomery and Pensacola Road.

We find the following letter from the distinguished President of the Alabama and Florida Railroad in the *Pensacola Observer*.—The Pensacola papers have been in some tribulation about a rumored agreement between that and the Great Northern road, to delay the connection with Pensacola, until our road had effected a junction. We always knew that this arrangement had no existence except in the fears of the Pensacolians, but Mr Pollard's letter, besides contradicting this idle rumor, contains matters of interest to our community.

MONTGOMERY, April 9th, 1860.

Dear Sir: I have noticed recently some fears expressed in Pensacola, that the completion of our end of the Alabama and Florida Railroad is to be delayed, by an understanding with the Mobile and Great Northern Railroad Company, and that the two roads, that is, our end of the Alabama and Florida road, and the Mobile and Great Northern, will be completed and opened about the same time, so as to take from Pensacola any advantage that might be derived by an earlier railroad connection of that place with Montgomery.

No such understanding exists between the two companies, or has ever been even suggested. An arrangement has been made that the two companies shall form a junction at some eligible point, between Fort Crawford and the Florida line, so as to transfer passengers and teams over our freight cars to go through without breaking bulk—and have agreed to place the freights and passengers, each of the other, upon the most favorable footing.

When this arrangement is put in operation, I shall propose to your company to run up your trains, both freight and passenger, to the same

point, so that at the same time, and under a common passenger depot, we may transfer to both roads at the same time; until then we shall exchange with you at the Florida line, or make such arrangement as may be satisfactory to your company.

If your could have completed your end of the road by the 1st instant, I could have given you the connection with Montgomery by the 1st day of January, 1861. I fear now you will not get any of our iron up before the 1st of June—and I cannot complete our end of the line before the 1st of April, 1861.

We have ready for transportation 800 tons, as you know; by the time this reaches you I hope two first class locomotives, shipped from Philadelphia on the 17th ult., will be safely in and landed on your wharf, and that the iron work for a train of freight cars, which we shall build in Pensacola, will not be many days behind.

I will close my iron contracts by the 1st of May, and I have so longed delayed doing so only to save the interest, for we have been exceedingly fortunate in making sales of our bonds as we have needed the money, and *always at par.*

We have iron now laying at our Montgomery depot to complete the road to the 63 mile station, south of Montgomery, and which we expect to open by the 1st day of July.

You may feel every confidence in assuring your friend, if you can complete your road to the State line by the 1st of June so that we can get through our iron, for I purpose to land the remainder at Pensacola, (3,200 tons,) Pensacola and Montgomery will be connected by rail, certainly, by the 1st day of April, and *perhaps sooner.* I am very respectfully,

C. T. POLLARD, Pres't.
To Major W. H. CHASE, President, &c.
—From the *Mobile Register* of April 18th 1860.

St. Joseph and Marysville Road.

The pioneer engine "Albany," the first locomotive west of the Missouri, was put upon the St. Joseph and Marysville Road on the 23rd ult. The "Albany" was procured from Eastern companies by the first road west of Albany, and has been the engine on each road in the chain. It has been extended westward until it now stands upon the first section of the Central route to the Pacific.—

REMOVAL.

THE subscriber respectfully informs his friends and the public that he is about to remove to his new building No. 24 Columbia st., where he will be prepared to furnish



Hydraulic Jacks,

of from 4 to 150 tons lifting power. PULLING JACKS of different sizes. Hydraulic Presses with Plates. Hydraulic PUNCHES for punching from 1/8 to one inch holes through iron one inch thick—FORCE PUMPS for Hydraulic Presses for testing tubes, cylinders, etc., as high as 20,000 lbs. to the inch. STEAM

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Printed lists giving description of Machinery to be sold, with terms of sale, will be furnished on application by mail to
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The chamber is made large enough to save all drippings that will be accumulated while using a can full of oil, and when the tube is unscrewed to refill the Can, the oil therein collected will run back, keeping the Can always clean on the outside, as well as saving the drippings which are always waste, when using the common Can, by running down the outside & keeping them constantly covered with oil, which difficulty this Can entirely obviates.

Price from \$1.25 to \$3.50 per doz., according to size. Attention is invited to the Sewing Machine Can, which is got up in a cheap and handsome manner. Also the common Oil Cans, Door Escutcheons, Drops, Key Bases, etc., at the lowest prices.



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- 3rd. It will keep all journals and bearings cool, clean and bright as new, thus not only saving wear and tear, but saving also no inconsiderable amount of motive power.
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ENGLISH and AMERICAN Railroad Iron for delivery in
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THE subscribers, Agents for the Manufacturers, are pre-
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shipping port in Wales.

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500 tons T Rails on hand, 54 to 57 lbs. per lineal yard.

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or the United States.

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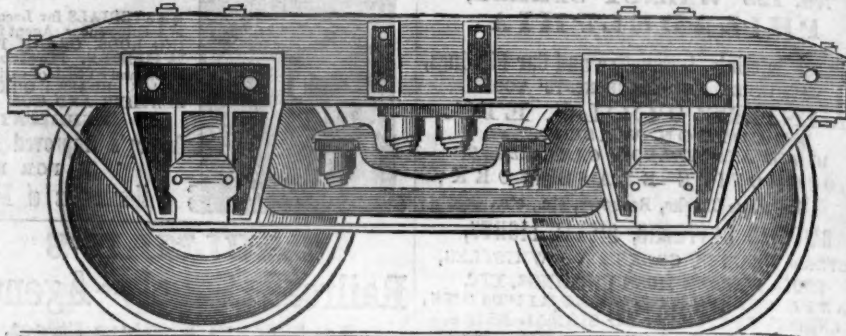
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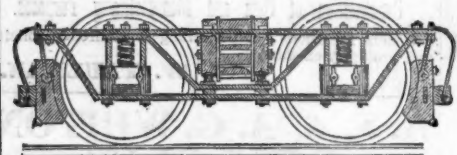
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RICHARD VOSE, Secretary.

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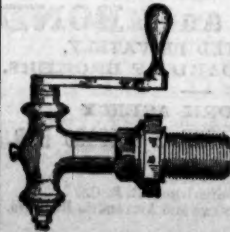
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